SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

SCHEDULE 13G

UNDER THE SECURITIES EXCHANGE ACT OF 1934

Pyxis Oncology, Inc.

(Name of Issuer)

Common Stock, par value $0.001

(Title of Class of Securities)

(CUSIP Number)

09/30/2026

(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 OrbiMed Advisors 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	5	Sole Voting Power 0.00

Owned by Each Reporting Person With:	6	Shared Voting Power 4,013,720.00
	7	Sole Dispositive Power 0.00
	8	Shared Dispositive Power 4,013,720.00
9		Aggregate Amount Beneficially Owned by Each Reporting Person 4,013,720.00
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) 3.4 %
12		Type of Reporting Person (See Instructions) IA

SCHEDULE 13G

CUSIP No.

1		Names of Reporting Persons OrbiMed Capital 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 4,348,197.00
	6	Shared Voting Power 0.00
	7	Sole Dispositive Power 4,348,197.00
	8	Shared Dispositive Power 0.00
9		Aggregate Amount Beneficially Owned by Each Reporting Person 4,348,197.00
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) 3.6 %

12 Type of Reporting Person (See Instructions)

IA

SCHEDULE 13G

Item 1.

(a) Name of issuer:

Pyxis Oncology, Inc.

(b) Address of issuer's principal executive offices:

321 Harrison Avenue Boston, MA, 02118

Item 2.

(a) Name of person filing:

OrbiMed Advisors LLC OrbiMed Capital LLC

(b) Address or principal business office or, if none, residence:

601 Lexington Avenue, 54th Floor New York, NY 10022

(c) Citizenship:

Please refer to Item 4 on each cover sheet for each filing person.

(d) Title of class of securities:

Common Stock, par value $0.001

(e) CUSIP No.:

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

(a) Amount beneficially owned:

OrbiMed Advisors LLC: 4,013,720 OrbiMed Capital LLC: 4,348,197

(b) Percent of class:

OrbiMed Advisors LLC: 3.4% OrbiMed Capital LLC: 3.6% %

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

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

OrbiMed Advisors LLC: 0 OrbiMed Capital LLC: 4,348,197

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

OrbiMed Advisors LLC: 4,013,720 OrbiMed Capital LLC: 0

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

OrbiMed Advisors LLC: 0 OrbiMed Capital LLC: 4,348,197

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

OrbiMed Advisors LLC: 4,013,720 OrbiMed Capital LLC: 0

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

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

If any other person is known to have the right to receive or the power to direct the receipt of dividends from, or the proceeds from the sale of, such securities, a statement to that effect should be included in response to this item and, if such interest relates to more than 5 percent of the class, such person should be identified. A listing of the shareholders of an investment company registered under the Investment Company Act of 1940 or the beneficiaries of employee benefit plan, pension fund or endowment fund is not required.

The Reporting Persons hold 7.0% of the shares of Common Stock in the aggregate on behalf of other persons who have the right to receive or the power to direct the receipt of dividends from, or proceeds from the sale of, such securities. OrbiMed Advisors LLC and OrbiMed Capital LLC exercise investment and voting power over the shares of Common Stock through a management committee comprised of Carl L. Gordon, W. Carter Neild, and Geoffrey C. Hsu, each of whom disclaims beneficial ownership of the shares of Common Stock reported herein.

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.

Not Applicable

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 acquired and are held in the ordinary course of business and 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.

OrbiMed Advisors LLC

Signature: /s/ Carl L. Gordon
Name/Title: Carl L. Gordon / Member
Date: 11/16/2026

OrbiMed Capital LLC

Signature: /s/ Carl L. Gordon
Name/Title: Carl L. Gordon / Member
Date: 11/16/2026

EXHIBIT A
JOINT FILING AGREEMENT

The undersigned hereby agree that this Statement on Schedule 13G, dated September 30, 2026 (this "Schedule 13G"), with respect to the Common Stock, par value $0.001, of Pyxis Oncology, Inc. is filed on behalf of each of us pursuant to and in accordance with the provisions of Rule 13d-1(k) under the Securities Exchange Act of 1934, as amended, and that this Joint Filing Agreement shall be included as an Exhibit to this Schedule 13G. Each of the undersigned agrees to be responsible for the timely filing of this Schedule 13G and for the completeness and accuracy of the information concerning itself contained therein. This Joint Filing Agreement may be executed in any number of counterparts, all of which taken together shall constitute one and the same instrument.

IN WITNESS WHEREOF, the undersigned have executed this Joint Filing Agreement as of November 16, 2026.

OrbiMed Advisors LLC

By: /s/ Carl L. Gordon
Name: Carl L. Gordon
Title: Member

OrbiMed Capital LLC

By: /s/ Carl L. Gordon
Name: Carl L. Gordon
Title: Member