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 per share

(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 RTW Investments, 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	5	Sole Voting Power 0.00

Owned by Each Reporting Person With:	6	Shared Voting Power 8,535,153.00
	7	Sole Dispositive Power 0.00
	8	Shared Dispositive Power 8,535,153.00
9		Aggregate Amount Beneficially Owned by Each Reporting Person 8,535,153.00
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) IA, PN

SCHEDULE 13G

CUSIP No.

1		Names of Reporting Persons Roderick Wong
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 UNITED STATES
Number of Shares Beneficially Owned by Each Reporting Person With:	5	Sole Voting Power 0.00
	6	Shared Voting Power 8,535,153.00
	7	Sole Dispositive Power 0.00
	8	Shared Dispositive Power 8,535,153.00
9		Aggregate Amount Beneficially Owned by Each Reporting Person 8,535,153.00
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)

HC, IN

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:

This statement is filed by: (i) RTW Investments, LP ("RTW Investments"), a Delaware limited partnership and the investment adviser to certain funds (the "RTW Funds"), with respect to shares of Common Stock, par value $0.001 per share (the "Shares") of Pyxis Oncology, Inc. (the "Company") directly held by the RTW Funds; and (ii) Roderick Wong, M.D. ("Dr. Wong"), the Managing Partner and Chief Investment Officer of RTW Investments, with respect to the Shares directly held by the RTW Funds. The foregoing persons are hereinafter sometimes collectively referred to as the "Reporting Persons." The filing of this statement should not be construed as an admission that any of the foregoing persons or any Reporting Person is, for the purposes of Section 13 of the Securities Exchange Act of 1934, as amended, the beneficial owner of the Shares reported herein.

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

The address of the business office of each of the Reporting Persons is 40 10th Avenue, Floor 7, New York, New York 10014.

(c) Citizenship:

RTW Investments is a Delaware limited partnership. Dr. Wong is a citizen of the United States.

(d) Title of class of securities:

Common Stock, par value $0.001 per share

(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:

The information required by Item 4(a) is set forth in Rows 5 - 9 of the cover page for each of the Reporting Persons and is incorporated herein by reference. The amounts reported herein assume the exercise of warrants held by the Reporting Persons to purchase 2,028,924 Shares (the "Warrants"), the maximum amount that may be exercised given the current number of outstanding shares and the shares held by the Reporting Persons. Pursuant to the terms of the

Warrants, the Reporting Persons cannot exercise any of the Warrants to the extent the Reporting Persons would beneficially own, after any such exercise, more than 9.99% of the outstanding Shares. The percentages set forth in Row 11 of the cover pages are calculated based upon 83,408,050 Shares outstanding as of August 19, 2026 as reported in the Company's prospectus dated August 28, 2026 filed with the Securities and Exchange Commission (the "SEC") on August 28, 2026, and assume the exercise of Warrants held by the Reporting Persons to purchase 2,028,924 Shares.

(b) Percent of class:

RTW Investments: 9.99% Dr. Wong: 9.99% %

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

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

RTW Investments: 0 Dr. Wong: 0

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

RTW Investments: 8,535,153 Shares Dr. Wong: 8,535,153 Shares

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

RTW Investments: 0 Dr. Wong: 0

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

RTW Investments: 8,535,153 Shares Dr. Wong: 8,535,153 Shares

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.

See Item 2. The RTW Funds have the right to receive or the power to direct the receipt of dividends from, or the proceeds from the sale of, the Shares reported herein. RTW Master Fund Ltd., an RTW Fund, has the right to receive or the power to direct the receipt of dividends or the proceeds from the sale of more than 5% of the Shares.

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.

RTW Investments, LP

Signature: /s/ Roderick Wong, M.D.

Name/Title: Roderick Wong, M.D., Managing Partner

Date: 11/16/2026

Roderick Wong

Signature: /s/ Roderick Wong, M.D.
Name/Title: Roderick Wong, M.D.
Date: 11/16/2026

Exhibit Information

Exhibit 99.1 Joint Filing Agreement

EXHIBIT 99.1

JOINT FILING AGREEMENT
PURSUANT TO RULE 13(d)-1(k)

The undersigned acknowledge and agree that the foregoing statement on Schedule 13G is filed on behalf of each of the undersigned and that all subsequent amendments to this statement on Schedule 13G shall be filed on behalf of each of the undersigned without the necessity of filing additional joint filing agreements. The undersigned acknowledge that each shall be responsible for the timely filing of such amendments, and for the completeness and accuracy of the information concerning him or it contained herein and therein, but shall not be responsible for the completeness and accuracy of the information concerning the others, except to the extent that he or it knows or has reason to believe that such information is inaccurate.

Dated: November 16, 2026

RTW Investments, LP

By: /s/ Roderick Wong, M.D.
Name: Roderick Wong, M.D.
Title: Managing Partner

Roderick Wong, M.D.

/s/ Roderick Wong, M.D.