

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

AMENDMENT NO. 8
TO
FORM S-1
REGISTRATION STATEMENT

UNDER
THE SECURITIES ACT OF 1933
ALOPEXX, INC.

(Exact name of Registrant as specified in its charter)

Delaware
(State or other jurisdiction of
incorporation or organization)

2836
(Primary Standard Industrial
Classification Code Number)

86-3959763
(I.R.S. Employer
Identification Number)

Alopexx, Inc.
186 Alewife Brook Pkwy #1068
Cambridge, Massachusetts 02138
(617) 780-1598
(Address, including zip code, and telephone number, including area code, of Registrant's principal executive offices)

Daniel R. Vlock
President and Chief Executive Officer
Alopexx Inc.
186 Alewife Brook Pkwy #1068
Cambridge, Massachusetts 02138
(617) 780-1598
(Name, address, including zip code, and telephone number, including area code, of agent for service)

Richard Yates
McElroy Deutsch
820 Bausch & Lomb Place
Rochester, New York 14604
(585) 563-3410

W. David Mannheim
Michael K. Bradshaw, Jr.
Nelson Mullins Riley & Scarborough LLP
4140 Parklake Avenue, Suite 200
Raleigh, North Carolina 27612
(919) 329-3800

Approximate date of commencement of proposed sale to the public: **As soon as practicable after this Registration Statement is declared effective.**

If any of the securities being registered on this form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, check the following box. ☒

If this form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ☐

If this form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ☐

If this form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ☐

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 ☐
Non-accelerated filer ☒

Accelerated filer ☐
Smaller reporting company ☒
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 7(a)(2)(B) of the Securities Act. ☐

The Registrant hereby amends this Registration Statement on such date or dates as may be necessary to delay its effective date until the Registrant shall file a further amendment which specifically states that this Registration Statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933 or until the Registration Statement shall become effective on such date as the Commission, acting pursuant to said Section 8(a), may determine.

EXPLANATORY NOTE

Alopexx, Inc. is filing this Amendment No. 8 to its registration statement on Form S-1 (File No. 333-263328) as an exhibits-only filing to file the consent of Marcum LLP filed herewith as Exhibit 23.1 in order to update the consent previously filed with the Registration Statement. Accordingly, this Amendment No. 8 consists only of the facing page, this explanatory note, Item 16(a) of Part II of the Registration Statement, the signature page to the Registration Statement and the filed exhibit. The remainder of the Registration Statement is unchanged and has therefore been omitted.

Item 16. Exhibits and Financial Statement Schedules)

(a) Exhibits

1.1 **	Form of Underwriting Agreement.
3.1 **	Certificate of Incorporation of the Registrant as currently in effect.
3.2 **	Form of Amended and Restated Certificate of Incorporation of Registrant, to be in effect prior to the completion of this offering.
3.3 **	Bylaws of the Registrant, as currently in effect.
3.4 **	Form of Amended and Restated Bylaws of the Registrant, to be in effect prior to the completion of this offering.
4.1 **	Specimen Common Stock Certificate.
5.1 **	Opinion of McElroy, Deutsch Mulvaney & Carpenter LLP.
10.1 **	2022 Equity Plan and form of award agreements thereunder.
10.2 **	Form of Employment Agreements between the Registrant and each of its executive officers.
10.3 **	Form of Indemnification Agreement between the Registrant and each of its directors.
10.4 **#	Exclusive Patent License Agreement dated as of December 4, 2007, by and between Alopexx Pharmaceuticals, LLC and The Brigham and Women's Hospital, Inc., as amended on November 30, 2009, January 27, 2010, and March 6, 2015.
10.5 **#	Amendment No. 5 to Exclusive Patent License Agreement dated as of February 2, 2022, by and between Alopexx, Inc. and The Brigham and Women's Hospital, Inc.
10.6 **#	Exclusive Patent License Agreement dated as of March 2, 2012, by and between Alopexx Vaccine, LLC and The Brigham and Women's Hospital, Inc. as amended on April 9, 2019.
10.7 **#	Amendment No. 2 to the Exclusive Patent License Agreement by and between Alopexx, Inc. and Brigham and Women's Hospital, Inc. dated as of February 2, 2022.
23.1	Consent of Marcum LLP
23.2 **	Consent of McElroy, Deutsch Mulvaney & Carpenter LLP (included in Exhibit 5.1)
99.1 **	Consents of Director Nominees
107.1 **	Filing Fee Table

Certain confidential information contained in this agreement has been omitted because it is not material and would be competitively harmful if publicly disclosed.

** Previously filed.

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Signatures

Pursuant to the requirements of the Securities Act of 1933, as amended, the Registrant has duly caused this Registration Statement on Form S-1 to be signed on its behalf by the undersigned, thereunto duly authorized, in Cambridge, Massachusetts, on October 7, 2022.

ALOPEXX, INC.

By: /s/ Daniel R. Vlock
Name: Daniel R. Vlock
Title: President and Chief Executive Officer

POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Daniel R. Vlock his/her true and lawful attorney-in-fact and agent with full power of substitution and re-substitution, for him/her and in his name, place and stead, in any and all capacities to sign any or all amendments (including, without limitation, post-effective amendments) to this Registration Statement, any related Registration Statement filed pursuant to Rule 462(b) under the Securities Act of 1933, as amended, and any or all pre- or post-effective amendments thereto, and to file the same, with all exhibits thereto, and all other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorney-in-fact and agent, full power and authority to do and perform each and every act and thing requisite and necessary to be done in and about the premises, as fully for all intents and purposes as he or she might or could do in person, hereby ratifying and confirming that said attorney-in-fact and agent, or any substitute or substitutes for him, may lawfully do or cause to be done by virtue hereof. Pursuant to the requirements of the Securities Act of 1933, as amended, the following persons in the capacities and on the dates indicated have signed this Registration Statement below.

Signature	Title	Date
<u>/s/ Daniel R. Vlock</u> Daniel R. Vlock	President, Chief Executive Officer and Director (Principal Executive Officer)	October 7, 2022
<u>/s/ Thomas T. Thomas</u> Thomas T. Thomas	Chief Financial Officer (Principal Financial and Accounting Officer)	October 7, 2022
<u>/s/ Peter J. Werth</u> Peter J. Werth	Director	October 7, 2022



INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM'S CONSENT

We consent to the inclusion in this Registration Statement of Alopexx, Inc. on Form S-1 (File No. 333-263328) of our report dated March 4, 2022, except for Note 10, to which the date is April 7, 2022 and Note 7, to which the date is August 24, 2022, which includes an explanatory paragraph as to the Company's ability to continue as a going concern, with respect to our audits of the financial statements of Alopexx, Inc. as of December 31, 2021 and 2020 and for the years then ended, which report appears in the Prospectus, which is part of this Registration Statement. We also consent to the reference to our Firm under the heading "Experts" in such Prospectus.

/s/ Marcum LLP

Marcum LLP
Hartford, CT
October 7, 2022
