

PROSPECTUS SUPPLEMENT

88,738,387 Shares of Common Stock



This prospectus supplement updates and amends the prospectus dated August 8, 2022 (as supplemented to date, the “Prospectus”), which forms a part of our Registration Statement on Form S-1 (Registration Statement No. 333- 258100) filed with the Securities and Exchange Commission (the “SEC”) on July 22, 2021, as amended by Post-Effective Amendment No. 1 to Form S-1 filed with the SEC on February 24, 2022, and Post-Effective Amendment No. 2 to Form S-1 on Form S-3 filed with the SEC on August 2, 2022 and declared effective by the SEC on August 8, 2022 (the “Registration Statement”).

The Prospectus and this prospectus supplement relate to (i) the resale of 4,286,500 shares of common stock, par value \$0.0001 per share (the “Common Stock”) issued in connection with the Domestication (as defined in the Prospectus) by certain of the selling securityholders named in the Prospectus (each a “selling securityholder” and, collectively, the “selling securityholders”), (ii) the resale of 69,655,827 shares of Common Stock issued in connection with the Business Combination (as defined in the Prospectus) by certain of the selling securityholders, (iii) the resale of 13,093,331 shares of Common Stock issued in the PIPE Financing (as defined in the Prospectus) by certain of the selling securityholders, and (iv) the resale of 1,702,729 shares of Common Stock reserved for issuance upon the exercise of certain outstanding options to purchase Common Stock. We will not receive any proceeds from the sale of our securities offered by the selling securityholders under the Prospectus.

This prospectus supplement should be read in conjunction with the Prospectus, which is to be delivered with this prospectus supplement. This prospectus supplement updates, amends and supplements the information included or incorporated by reference in the Prospectus. 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.

This prospectus supplement is not complete without, and may not be delivered or utilized except in connection with, the Prospectus, including any amendments or supplements to it.

Our Common Stock is listed on The Nasdaq Stock Market LLC (“Nasdaq”) under the symbol “NAUT.” On November 21, 2023, the last quoted sale price for our Common Stock as reported on Nasdaq was \$2.70 per share.

We are an “emerging growth company,” as defined under the federal securities laws, and, as such, may elect to comply with certain reduced public company reporting requirements for future filings.

Investing in our securities involves a high degree of risk. Before buying any securities, you should carefully read the discussion of the risks of investing in our securities in the section titled “Risk Factors” beginning on page 7 of the Prospectus.

You should rely only on the information contained in the Prospectus, this prospectus supplement or any prospectus supplement or amendment hereto. We have not authorized anyone to provide you with different information.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

The date of this prospectus supplement is November 21, 2023.

SELLING SECURITYHOLDERS

This prospectus supplement is filed solely for the purpose of including selling securityholders who have acquired Common Stock included for resale in this Prospectus from certain previously identified selling securityholders named in the Prospectus whose shares were registered for resale in the Registration Statement. Where the name of a selling securityholder identified in the table below also appears in the table in the Prospectus (i.e., ARYA Sciences Holdings III), the information set forth in the table below regarding that selling securityholder supersedes and replaces the information regarding such selling securityholder in the Prospectus. Information regarding the selling securityholders listed in the table below, including the number of shares of Common Stock beneficially owned by them, is based on information provided by such selling securityholders as of the date of this prospectus supplement. The percentage of beneficial ownership after the offered shares of Common Stock are sold is calculated based on 124,968,503 shares of Common Stock outstanding as of November 15, 2023.

Information about the selling securityholders, including those listed below, may change over time. Since the effectiveness of the Registration Statement of which the Prospectus is a part, certain securityholders may have sold or otherwise transferred their securities registered thereunder. This prospectus supplement does not provide any updates with respect to any sales or transfers, except for those expressly disclosed in the table below. As of November 21, 2023, the Selling Securityholders table included under the section “Selling Securityholders,” which begins on page 12 of the Prospectus, is revised to amend the information solely with respect to the following selling securityholders:

Name of Selling Securityholder	Common Stock Beneficially Owned Prior to Offering	Number of Shares of Common Stock Being Offered	Common Stock Beneficially Owned After the Offered Shares of Common Stock are Sold	
			Number	Percent
ARYA Sciences Holdings III (1)	—	—	—	—
Perceptive Life Sciences Master Fund, Ltd. (2)	12,428,351	11,731,313	697,038	*
C2 Life Sciences LLC (3)	165,860	165,860	—	—
Michael Altman (4)	341,762	165,860	175,902	*
Other selling securityholders not previously named in the Prospectus (5)	497,580	497,580	—	—

- (1) In connection with and pursuant to a liquidating distribution by ARYA Sciences Holdings III (the “Sponsor”) on November 15, 2023 (the “Sponsor Distribution”), the Master Fund (as defined below) received 3,317,200 shares of Common Stock and Perceptive SP(B), L.P. (the “Co-Investment Fund”) received 829,300 shares of Common Stock. In connection with and pursuant to a distribution by the Co-Investment Fund of all of the shares of Common Stock it received in the Sponsor Distribution to the distributees identified herein.
- (2) Perceptive Advisors LLC (“Perceptive”) is the investment advisor to Perceptive Life Sciences Master Fund, Ltd (the “Master Fund”). Joseph Edelman is the managing member of Perceptive. Perceptive and Mr. Edelman may be deemed to beneficially own the shares held by the Master Fund.
- (3) Perceptive serves as the investment advisor to C2 Life Sciences LLC. Joseph Edelman is the managing member of Perceptive. Mr. Edelman may be deemed to beneficially own the shares held by C2 Life Sciences LLC.
- (4) Consists of (i) 165,860 shares held by Mr. Altman and (ii) 175,902 shares of Common Stock issuable upon exercise of options held by Mr. Altman. Options to purchase 150,980 shares of Common Stock are exercisable within 60 days of November 20, 2023. Of the remaining 24,922 options to purchase shares of Common Stock (i) 18,750 options to purchase shares of Common Stock vest evenly on the 15th day of each month through June 15, 2024, and (ii) 6,172 options to purchase shares of Common Stock vest evenly on the 9th day of each month through June 9, 2024, in each case, subject to Mr. Altman’s continued status as a service provider through each vesting date. Mr. Altman is a member of the Board of Directors of the Company.
- (5) The aggregate holdings of such selling securityholders is less than 1% of the shares of Common Stock outstanding prior to the offering. Certain of the selling securityholders were officers of ARYA Sciences Acquisition Corp III prior to the consummation of the Business Combination.