
**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549**

SCHEDULE 13D

**Under the Securities Exchange Act of 1934
(Amendment No. 4)***

Morphic Holding, Inc.
(Name of Issuer)

Common Stock, par value \$0.0001 per share
(Title of Class of Securities)

61775R105
(CUSIP Number)

**Barbara Fiorini Due
Novo Holdings A/S
Tuborg Havnevej 19
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(Name, Address and Telephone Number of Person Authorized to Receive Notices and Communications)

February 17, 2022
(Date of Event which Requires Filing of this Statement)

If the filing person has previously filed a statement on Schedule 13G to report the acquisition which is subject of this Schedule 13D, and is filing this statement because of Rule 13d-1(e), 13d-1(f) or 13d-1(g), check the following box.

Note: Schedules filed in paper format shall include a signed original and five copies of the schedule, including all exhibits. See Rule 13d-7(b) for other parties to whom copies are to be sent.

* The remainder of this cover page shall be filled out for a reporting person's initial filing on this form with respect to the subject class of securities, and for any subsequent amendment containing information which would alter disclosures provided in a prior cover page.

The information required on the remainder of this cover page shall not be deemed to be "filed" for the purpose of Section 18 of the Securities Exchange Act of 1934 (the "Act") or otherwise subject to the liabilities of that section of the Act but shall be subject to all other provisions of the Act (however, see the Notes).

1.	Name of Reporting Person: Novo Holdings A/S	
2.	Check the Appropriate Box if a Member of Group (See Instructions): (a) <input type="checkbox"/> (b) <input type="checkbox"/>	
3.	SEC Use Only:	
4.	Source of Funds: WC	
5.	Check if Disclosure of Legal Proceedings is Required Pursuant to <u>Items 2(d)</u> or <u>2(e)</u>: <input type="checkbox"/>	
6.	Citizenship or Place of Organization: Denmark	
Number of Shares Beneficially Owned By Each Reporting Person With:	7.	Sole Voting Power: 1,845,030
	8.	Shared Voting Power: 0
	9.	Sole Dispositive Power: 1,845,030
	10.	Shared Dispositive Power: 0
11.	Aggregate Amount Beneficially Owned by Each Reporting Person: 1,845,030	
12.	Check if the Aggregate Amount in Row (11) Excludes Certain Shares: <input type="checkbox"/>	
13.	Percent of Class Represented By Amount In Row (11): 4.9% (1)	
14.	Type of Reporting Person: CO	

(1) Based upon 36,961,618 shares of the Issuer's Common Stock outstanding as of November 1, 2021, as reported in the Issuer's 10-Q filed with the Securities and Exchange Commission (the "SEC") on November 4, 2021.

Item 1. Security and Issuer

This amendment (“Amendment No. 4”), amends the Schedule 13D originally filed with the SEC on July 1, 2019, as subsequently amended by Amendment No. 1 filed on March 11, 2021, Amendment No. 2 filed on August 12, 2021, and Amendment No. 3 filed on November 1, 2021 (collectively, the “Schedule”), to report and reflect that Novo Holdings A/S ceased to be a beneficial owner of more than five percent of the Issuer’s Common Stock. All capitalized terms contained herein but not otherwise defined shall have the meanings ascribed to such terms in the Schedule.

Item 2. Identity and Background

Item 2 is amended and replaced in its entirety as follows:

- (a) Novo Holdings A/S is a Danish corporation that is wholly owned by Novo Nordisk Foundation (the “Foundation”), a Danish commercial foundation. Novo Holdings A/S is the holding company in the group of Novo companies (currently comprised of Novo Nordisk A/S and Novozymes A/S) and is responsible for managing the Foundation’s assets, including its financial assets. Based on the governance structure of Novo Holdings A/S and the Foundation, the Foundation is not deemed to have any beneficial ownership of the securities of the Issuer held by Novo Holdings A/S.

The name of each director and executive officer of both Novo Holdings A/S and the Foundation is set forth on the updated Schedule I to this Amendment No. 4.

- (b) The business address of both Novo Holdings A/S and the Foundation is Tuborg Havnevej 19, 2900 Hellerup, Denmark.

The residence or business address of each director and executive officer of both Novo Holdings A/S and the Foundation is set forth on the updated Schedule I to this Amendment No. 4.

- (c) Novo Holdings A/S, a holding company that is responsible for managing the Foundation’s assets, provides seed and venture capital to development stage companies and invests in well-established companies within the life science and biotechnology sector.

The Foundation is a Danish self-governing and profit-making foundation, whose objectives are to provide a stable basis for commercial and research activities undertaken by the group of Novo companies and to support scientific, humanitarian and social purposes through grants.

- (d) Within the last five years, neither Novo Holdings A/S, the Foundation, nor any person named in the updated Schedule I has been convicted in any criminal proceedings.

- (e) Within the last five years, neither Novo Holdings A/S, the Foundation, nor any person named in the updated Schedule I was a party to a civil proceeding of a judicial or administrative body of competent jurisdiction and as a result of such proceeding was or is subject to a judgment, decree or final order enjoining future violations of, or prohibiting or mandating activities subject to, federal or state securities laws or finding any violation with respect to such laws.

Item 3. Source and Amount of Funds or Other Consideration

Item 3 amends and supplements Item 3 in the Schedule as follows:

On February 10, 2022, Novo Holdings A/S sold 1,919 shares of Common Stock at \$44.4673 per share.

On February 11, 2022, Novo Holdings A/S sold 48,527 shares of Common Stock at \$42.4557 per share.

On February 14, 2022, Novo Holdings A/S sold 15,495 shares of Common Stock at \$41.5509 per share.

On February 15, 2022, Novo Holdings A/S sold 54,505 shares of Common Stock at \$41.8868 per share.

On February 16, 2022, Novo Holdings A/S sold 41,870 shares of Common Stock at \$41.6774 per share.

On February 17, 2022, Novo Holdings A/S sold 43,100 shares of Common Stock at \$40.3491 per share.

On February 18, 2022, Novo Holdings A/S sold 33,263 shares of Common Stock at \$40.0122 per share.

Item 5. Interest in Securities of the Issuer

Item 5 of the Schedule is amended and replaced in its entirety as follows:

(a) Novo Holdings A/S beneficially owns 1,845,030 shares of Common Stock (the “Novo Shares”) representing approximately 4.9% of the Issuer’s outstanding shares of Common Stock, based on 36,961,618 shares of the Issuer’s Common Stock outstanding as of November 1, 2021, as reported in the Issuer’s 10-Q filed with the SEC on November 4, 2021.

(b) Novo Holdings A/S is a Danish corporation wholly owned by the Novo Nordisk Foundation. Novo Holdings A/S has the sole power to vote and dispose of the Novo Shares. Neither the Foundation nor any person listed on the updated Schedule I has the power to direct the vote as to, or the disposition of, the Novo Shares.

(c) Except as described herein, Novo Holdings A/S has not effected any transactions in the Issuer’s Common Stock within the past 60 days and neither the Foundation nor any person listed on the updated Schedule I has effected any transactions in the Issuer’s Common Stock within the past 60 days.

(d) Novo Holdings A/S does not know of any other person having the right to receive or the power to direct the receipt of dividends from, or the proceeds from the sale of, the Novo Shares.

(e) As of February 17, 2022, Novo Holdings A/S ceased to be a beneficial owner of more than five percent of the Issuer’s Common Stock.

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.

Dated: February 21, 2022

Novo Holdings A/S

/s/ Barbara Fiorini Due

By: Barbara Fiorini Due

Its: General Counsel

Schedule I

Information regarding each director and executive officer of both Novo Holdings A/S and the Novo Nordisk Foundation is set forth below.

<i>Novo Holdings A/S</i>			
Name, Title	Address	Principal Occupation	Citizenship
Lars Rebien Sørensen, Chairman of the Board	Christianholms Tværvej 27, 2930 Klampenborg Denmark	Professional Board Director	Denmark
Steen Riisgaard, Vice Chairman of the Board	Hestetangsvej 155, 3520 Farum, Denmark	Professional Board Director	Denmark
Jean-Luc Butel, Director	235 Arcadia Road unit # 10-3 289843 Singapore	Global Healthcare Advisor, President, K8 Global Pte Ltd.	Singapore
Jeppe Christiansen, Director	c/o Kasper Fonager Christiansen Classensgade 59, 5. th. 2100 København Ø Denmark	Chief Executive Officer, Fondsmaeglerselskabet Maj Invest A/S	Denmark
Francis Michael Cyprian Cuss, Director	111 Rippling Brook Way, Bernardsville, NJ 07924 USA	Former Executive Vice President and Chief Scientific Officer of Bristol-Myers Squibb	United Kingdom
Viviane Monges, Director	Chemin de Craivavers 32, 1012 Lausanne, Switzerland	Professional Board Director	France
Henrik Poulsen, Director	Emiliekildevej 36 2930 Klampenborg Denmark	Professional Board Director and Senior Advisor, A.P. Møller Holding A/S,	Denmark
Kasim Kutay, Chief Executive Officer of Novo Holdings A/S	Bredgade 65, 3.tv. 1260 Copenhagen K. Denmark	Chief Executive Officer of Novo Holdings A/S	United Kingdom

<i>Novo Nordisk Foundation</i>			
Name, Title	Address	Principal Occupation	Citizenship
Lars Rebien Sørensen, Chairman of the Board	Christianholms Tværvej 27 2930 Klampenborg Denmark	Professional Board Director	Denmark
Marianne Philip, Vice Chairman of the Board	Annasvej 28 2900 Hellerup Denmark	Attorney	Denmark

Novo Nordisk Foundation

<u>Name, Title</u>	<u>Address</u>	<u>Principal Occupation</u>	<u>Citizenship</u>
Steen Riisgaard, Director	Hestetangsvej 155 3520 Farum Denmark	Professional Board Director	Denmark
Mads Krogsgaard Thomsen, Chief Executive Officer	Præstevejen 38 3230 Græsted Denmark	Chief Executive Officer, Novo Nordisk Foundation	Denmark
Anne Marie Kverneland, Director	Nybrovej 216 2800 Kgs. Lyngby Denmark	Laboratory technician, Novo Nordisk A/S	Denmark
Lars Bo Køppler, Director	Anemonevej 7 3550 Slangerup Denmark	Technician, Novozymes A/S	Denmark
Lars Henrik Fugger, Director	72 Staunton Road, Headington Great Britain	Professor, John Radcliffe Hospital, University of Oxford, Oxford, Great Britain	Denmark
Lars Henrik Munch, Director	Galionsvej 46 1437 Copenhagen K Denmark	Professional Board Director	Denmark
Mads Boritz Grøn, Director	Horsevænget 4 3400 Hillerød Denmark	Senior Lead Auditor	Denmark
Liselotte Højgaard, Director	Grønningen 21 1270 Copenhagen K Denmark	Professor	Denmark