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

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**SCHEDULE 13G**

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

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**Inogen, Inc.**  
(Name of Issuer)

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**Common Stock**  
(Title of class of securities)

**45780L104**  
(CUSIP number)

**December 31, 2014**  
(Date of event which requires filing of this statement)

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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)

\* 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 the disclosures provided in a prior cover page.

The information required in 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 ("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).

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1.	Name of Reporting Person: Novo 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.	Citizenship or Place of Organization: Denmark
Number of Shares Beneficially Owned By Each Reporting Person With:	5. Sole Voting Power: 3,549,320
	6. Shared Voting Power: 0
	7. Sole Dispositive Power: 3,549,320
	8. Shared Dispositive Power: 0
9.	Aggregate Amount Beneficially Owned by Each Reporting Person: 3,549,320
10.	Check if the Aggregate Amount in Row (9) Excludes Certain Shares: <input type="checkbox"/>
11.	Percent of Class Represented By Amount In Row (9): 19.1% (1)
12.	Type of Reporting Person: CO

- (1) Based upon 18,628,900 shares of the Issuer's Common Stock outstanding as of October 31, 2014, as reported in the Issuer's Form 10-Q filed with the Securities and Exchange Commission on November 12, 2014.

**Item 1. (a) Name of Issuer:**

Inogen, Inc.

**(b) Address of Issuer's Principal Executive Offices:**

326 Bollay Drive  
Goleta, CA 93117

**Item 2. (a) Name of Person Filing:**

Novo A/S, a Danish public limited company wholly owned by Novo Nordisk Fonden (the "Foundation"), a Danish commercial foundation. Novo A/S is the holding company in the group of Novo companies (currently comprised of Novo Nordisk A/S, Novozymes A/S and New Xellia Group A/S) and is responsible for managing the Foundation's assets, including its financial assets. Based on the governance structure of Novo A/S and the Foundation, the Foundation is not deemed to have any beneficial ownership of the securities of the Issuer held by Novo A/S.

**(b) Address or Principal Business Office or, if none, Residence:**

Tuborg Havnevej 19  
2900 Hellerup, Denmark

**(c) Citizenship or Place of Organization:**

Novo A/S: Denmark

**(d) Title of Class of Securities:**

Common Stock

**(e) CUSIP Number:**

45780L104

**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:**

Not applicable.

**Item 4. Ownership:**

Provide the following information regarding the aggregate number and percentage of the class of securities of the issuer identified in Item 1.

(a) Amount beneficially owned:	3,549,320	(1)
(b) Percent of class:	19.1%	(2)
(c) Number of shares as to which such person has:		
(i) Sole power to vote or to direct the vote:	3,549,320	(1)
(ii) Shared power to vote or to direct the vote:		
(iii) Sole power to dispose or to direct the disposition of:	3,549,320	(1)
(iv) Shared power to dispose or to direct the disposition of:		

- (1) The board of directors of Novo A/S (the “Novo Board”), currently comprised of Sten Scheibye, Goran Ando, Jeppe Christiansen, Steen Riisgaard and Per Wold-Olsen, has investment and voting control over the securities of the Issuer held by Novo A/S (the “Novo Shares”) and may exercise such control only with the support of a majority of the Novo Board. As such, no individual member of the Novo Board is deemed to hold any beneficial ownership or reportable pecuniary interest in the Novo Shares. Heath Lukatch, Ph.D., a member of the board of directors of the Issuer, is employed as a Partner at Novo Ventures (US) Inc., which provides certain consultancy services to Novo A/S. Dr. Lukatch is not deemed a beneficial owner of, and does not have a reportable pecuniary interest in, the Novo Shares.
- (2) Based upon 18,628,900 shares of the Issuer’s Common Stock outstanding as of October 31, 2014, as reported in the Issuer’s Form 10-Q filed with the Securities and Exchange Commission on November 12, 2014.

**Item 5. Ownership of Five Percent or Less of a Class:**

Not applicable.

**Item 6. Ownership of More Than Five Percent on Behalf of Another Person:**

Not applicable.

**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:**

Not applicable.

**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 2, 2015

Novo A/S

/s/ Thorkil Kastberg Christensen

By: Thorkil Kastberg Christensen

Its: Chief Financial Officer