UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 8-K

CURRENT REPORT Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

March 20, 2015 Date of Report (Date of earliest event reported)

Celladon Corporation

(Exact name of registrant as specified in its charter)

Delaware (State or other jurisdiction of incorporation) 001-36183 (Commission File Number)

11988 El Camino Real, Suite 650 San Diego, CA (Address of principal executive offices) 33-0971591 (IRS Employer Identification No.)

> 92130 (Zip Code)

Registrant's telephone number, including area code: (858) 366-4288

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligations of the registrant under any of the following provisions:

□ Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)

□ Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)

Dere-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))

Dere-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Item 1.01 Entry into a Material Definitive Agreement.

On March 20, 2015, Celladon Corporation (the "Company") entered into a Development, Manufacturing and Supply Agreement (the "Manufacturing Agreement") with Novasep, Inc. ("Novasep") which superseded the Letter Agreement dated December 19, 2014 by and between the Company and Novasep. Under the terms of the Manufacturing Agreement, the parties agreed to continue the work initiated under the Letter Agreement, including the work necessary to prepare for the potential manufacture of MYDICAR drug substance (AAV1/SERCA2a) at the facilities of Novasep's affiliate Henogen in Europe (the "Novasep Facility"). Pursuant to the Manufacturing Agreement (and as previously agreed in the Letter Agreement), in exchange for payments from the Company to Novasep totaling up to €4,750,000, Novasep agreed to (i) conduct the engineering design work for facility modifications that would be necessary for the manufacture of MYDICAR drug substance, (ii) undertake initial process and analytical transfer and initial scale-up work in support of such potential future commercial manufacturing of MYDICAR drug substance, and (iii) allocate the resources and capacity necessary for the foregoing activities. The parties have also agreed to proceed with the additional process transfer, engineering/construction, scale-up and development activities necessary for future production of MYDICAR drug substance in accordance with current Good Manufacturing Practices ("GMP"), and agreed to terms of a commercial supply arrangement with a term through at least December 31, 2018, with extension options through 2020 in favor of the Company. The Company has the right to terminate the Manufacturing Agreement, exercisable for a specified period of time following the un-blinding of the data from the Company's Phase 2b clinical trial of MYDICAR (CUPID 2), if the Company concludes in good faith that the CUPID 2 data is such that the COPID 2 trial in late April 2015.

Unless the Company exercises the post CUPID 2 data termination right described above, the Company will be obligated to (i) fund Novasep's modifications to the Novasep Facility through time- and event-triggered milestone payments, (ii) make additional payments for the development services to be performed by Novasep, and (iii) commit to purchase a specified number of batches of MYDICAR drug substance (or make minimum payments with respect to any such batches that are not purchased) through 2018 (if the Company elects that the Novasep Facility be operated as a multi-product facility) or through 2019 (if the Company elects to have the Novasep Facility dedicated to MYDICAR drug substance production during the term of the Manufacturing Agreement).

In addition to the above-described post CUPID 2 data termination right, the Company has the right to terminate the Manufacturing Agreement (i) at will on or before March 31, 2016, (ii) following the shut-down or non-production of the Novasep Facility for a specified period of time, or (iii) upon Novasep's debarment. Additionally, each party may terminate the Manufacturing Agreement upon uncured material breach thereof by the other party, upon the other party's insolvency or bankruptcy, or in the event of a continuing force majeure preventing performance. Upon any termination of the Manufacturing Agreement by Celladon following the expiration of the post CUPID 2 data termination right either for convenience or for any reason other than material breach of the Manufacturing Agreement, shut-down or non-production of the Novasep Facility for a period extending longer than six months, or Novasep's insolvency, the Company is obligated to pay previously-unreimbursed amounts incurred by Novasep and specified termination fees as set forth in the Manufacturing Agreement.

The foregoing description is only a summary of certain provisions of the Manufacturing Agreement and is qualified in its entirety by the terms of the Manufacturing Agreement, a copy of which will be filed as an exhibit to the Company's Annual Report on Form 10-K for the year ended December 31, 2014.

Forward Looking Statements:

Certain statements in this Current Report on Form 8-K are forward-looking statements that involve a number of risks and uncertainties. Such forward-looking statements include, but are not limited to (i) statements regarding potential future activities under the Manufacturing Agreement that are contingent upon the Manufacturing Agreement not being terminated early, and (ii) statements regarding the potential future GMP production and commercial supply of MYDICAR. For such statements, the Company claims the protection of the Private Securities Litigation Reform Act of 1995. Actual events or results may differ materially from the Company's expectations. Factors that could cause actual results to differ materially from the forward-looking statements include, but are not limited to, the following: the outcome

of the CUPID 2 clinical trial of MYDICAR; requirements of regulatory authorities regarding the manufacture of MYDICAR; the Company's ability to obtain financing and fund the commercial manufacture of MYDICAR; risks and uncertainties associated with the process of conducting product development activities and clinical trials and obtaining regulatory approval to commercialize MYDICAR; risks and uncertainties regarding the timing of obtaining any such regulatory approval; the Company's reliance on third parties; the need to raise additional funding when needed in order to conduct the Company's business; and the degree of market acceptance of MYDICAR by physicians, patients, third-party payors and others in the medical community. Additional factors that could cause actual results to differ materially from those stated or implied by our forward-looking statements are disclosed in the Company's filings with the Securities and Exchange Commission. These forward-looking statements represent the Company's judgment as of the time of the filing of this Form 8-K. The Company disclaims any intent or obligation to update these forward-looking statements, other than as may be required under applicable law. SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

Celladon Corporation

By: /s/ Paul B. Cleveland

Paul B. Cleveland President and Chief Financial Officer

Dated: March 25, 2015