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As filed with the Securities and Exchange Commission on June 16, 2015.

Registration No. 333-

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

FORM S-1
REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933

NIVALIS THERAPEUTICS, INC.

(Exact name of Registrant as specified in its charter)

Delaware (State or Other Jurisdiction of Incorporation or Organization)	2834 (Primary Standard Industrial Classification Code Number)	20-8969493 (I.R.S. Employer Identification Number)
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**3122 Sterling Circle
Suite 200
Boulder, CO 80301
(720) 945-7700**

(Address, including zip code, and telephone number, including area code, of Registrant's principal executive offices)

**Jon Congleton
President and Chief Executive Officer
Nivalis Therapeutics, Inc.
3122 Sterling Circle
Suite 200
Boulder, CO 80301
(720) 945-7700**

(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copies to:

**Laura I. Bushnell, Esq.
Keith M. Townsend, Esq.
Markus K. Bauman, Esq.
King & Spalding LLP
601 S. California Avenue, Suite 100
Palo Alto, CA 94304
(650) 422-6700**

**Michael D. Maline, Esq.
Robert E. Puopolo, Esq.
Goodwin Procter LLP
The New York Times Building
620 Eighth Avenue
New York, NY 10018
(212) 813-8800**

Approximate date of commencement of proposed sale to the public: As soon as practicable after the effective date of this registration statement.

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, as amended, 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, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. (Registration No. 333-204127)

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, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act.

Large Accelerated Filer

Accelerated Filer

Non-Accelerated Filer

Smaller Reporting Company

(Do not check if a smaller reporting company)

The Registrant is an "emerging growth company" as defined in Section 2(a) of the Securities Act. This registration statement complies with the requirements that apply to an issuer that is an emerging growth company.

CALCULATION OF REGISTRATION FEE

Title of Each Class of Securities to be Registered	Proposed Maximum Aggregate Offering Price(1)(2)	Amount of Registration Fee
Common Stock, par value \$0.001 per share	\$14,621,446	\$1,700

- (1) In accordance with Rule 462(b) promulgated under the Securities Act of 1933, as amended, an additional amount of securities having a proposed maximum offering price of no more than 20% of the maximum aggregate offering price of the securities eligible to be sold under the related Registration Statement on Form S-1, as amended (File No. 333-204127), is hereby registered. Includes the offering price of shares that may be purchased by the underwriters pursuant to an option to purchase additional shares.
- (2) Based on the public offering price of \$14.00 per share.

This Registration Statement shall become effective upon filing with the Securities and Exchange Commission in accordance with Rule 424(b) under the Securities Act of 1933, as amended.

EXPLANATORY NOTE AND INCORPORATION BY REFERENCE

This Registration Statement is being filed pursuant to Rule 462(b) under the Securities Act of 1933, as amended. The contents of the Registration Statement on Form S-1, as amended (Commission File No. 333-204127), initially filed by Nivalis Therapeutics, Inc. with the Securities and Exchange Commission (the "Commission") on May 13, 2015, which was declared effective by the Commission on June 16, 2015, are incorporated herein by reference.

The Registrant hereby certifies that it (i) has instructed its bank to transmit to the Commission the filing fee set forth on the cover page of this Registration Statement by a wire transfer of such amount to the Commission's account as soon as practicable (but no later than the close of business on June 17, 2015), (ii) will not revoke such instructions, (iii) has sufficient funds in the relevant account to cover the amount of such filing fee and (iv) will confirm receipt of such instructions by its bank during the bank's regular business hours no later than June 17, 2015.

INDEX TO EXHIBITS

<u>Exhibit No.</u>	
5.1	Opinion of King & Spalding LLP
23.1	Consent of King & Spalding LLP (included as part of Exhibit 5.1)
23.2	Consent of Ernst & Young LLP, independent registered public accounting firm
24.1	Powers of Attorney (incorporated by reference to Exhibit 24.1 to the Company's Registration Statement on Form S-1 (Registration No. 333-204127))

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KING & SPALDING

King & Spalding LLP
601 S. California Avenue,
Suite 100
Palo Alto, CA 94304

June 16, 2015

Nivalis Therapeutics, Inc.
3122 Sterling Circle
Boulder, CO 80301

Re: Nivalis Therapeutics, Inc. — Form S-1 Registration Statement

Ladies and Gentlemen:

We have acted as counsel to Nivalis Therapeutics, Inc., a Delaware corporation (the “Company”), in connection with the preparation of the Registration Statement on Form S-1 (Registration No. 333-204127) (as amended, the “Initial Registration Statement”) filed with the Securities and Exchange Commission (the “Commission”) under the Securities Act of 1933, as amended (the “Act”) and the Registration Statement on Form S-1 (the “462(b) Registration Statement”) and, together with the Initial Registration Statement, the “Registration Statement”) filed with the Commission pursuant to Rule 462(b) under the Act. The 462(b) Registration Statement relates to the sale of up to \$14,621,446 of shares (the “Shares”) of the Company’s Common Stock, par value \$0.001 per share (the “Common Stock”), by the Company. This opinion is being furnished in connection with the requirements of Item 601(b)(5) of Regulation S-K under the Act, and no opinion is expressed herein as to any matter pertaining to the contents of the Registration Statement or related prospectus (the “Prospectus”), other than as expressly stated herein with respect to the issuance of the Shares.

In connection with this opinion, we have examined and relied upon such records, documents, certificates and other instruments as in our judgment are necessary or appropriate to form the basis for the opinions hereinafter set forth. In all such examinations, we have assumed the genuineness of signatures on all documents submitted to us as originals and the conformity to original documents of all copies submitted to us as certified, conformed or photographic copies, and as to certificates of public officials, we have assumed the same to have been properly given and to be accurate. As to matters of fact material to this opinion, we have relied, without independent verification, upon statements and representations of representatives of the Company and public officials.

The opinions expressed herein are limited in all respects to the General Corporation Law of the State of Delaware, and no opinion is expressed with respect to the laws of any other jurisdiction or any effect which such laws may have on the opinions

Nivalis Therapeutics, Inc.
June 16, 2015
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expressed herein. This opinion is limited to the matters stated herein, and no opinion is implied or may be inferred beyond the matters expressly stated herein.

Based upon the foregoing, and subject to all of the assumptions, limitations and qualifications set forth herein, we are of the opinion that the Shares have been duly authorized and, when the Shares have been issued, delivered and paid for as contemplated in the Registration Statement, will be validly issued, fully paid and nonassessable.

This opinion is given as of the date hereof, and we assume no obligation to advise you after the date hereof of facts or circumstances that come to our attention or changes in law that occur which could affect the opinions contained herein.

We consent to the filing of this opinion as an exhibit to the 462(b) Registration Statement and to the reference to us under the caption "Legal Matters" in the Prospectus. In giving such consent, we do not thereby admit that we are in the category of persons whose consent is required under Section 7 of the Act or the rules and regulations thereunder.

Very truly yours,

/s/ King & Spalding LLP

Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in the Registration Statement on Form S-1 filed pursuant to Rule 462(b) of the Securities Act of 1933 of the reference to our firm under the caption “Experts” and to the incorporation by reference of our report dated March 17, 2015 (except Notes 3, 6, 8, 11, and 12, as to which the date is June 3, 2015), with respect to the financial statements of Nivalis Therapeutics, Inc. included in Amendment No. 1 to the Registration Statement (Form S-1 No. 333-204127) and related Prospectus of Nivalis Therapeutics, Inc. for the registration of its common stock.

/s/ Ernst & Young

Denver, Colorado
June 16, 2015
