NUVELO INC Form S-3ASR June 29, 2006

As filed with the Securities and Exchange Commission on June 29, 2006

Registration No. 333-

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

FORM S-3

REGISTRATION STATEMENT

UNDER

THE SECURITIES ACT OF 1933

NUVELO, INC.

(Exact name of registrant as specified in its charter)

Delaware (State or Other Jurisdiction of Incorporation or Organization) 363855489 (I.R.S. Employer Identification No.)

201 Industrial Road, Suite 310

San Carlos, CA 94070-6211

(650) 517-8000

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

Ted W. Love

Chairman of the Board and Chief Executive Officer

201 Industrial Road, Suite 310

San Carlos, CA 94070-6211

(650) 517-8000

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

Copies to:

Robert L. Jones, Esq.

John M. Geschke, Esq. Cooley Godward LLP Five Palo Alto Square 3000 El Camino Real Palo Alto, CA 94306-2155 (650) 843-5000

Approximate date of commencement of proposed sale to the public:

From time to time after the effective date of this registration statement

If the only securities being registered on this Form are being offered pursuant to dividend or interest reinvestment plans, please check the following box.

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, other than securities offered only in connection with dividend or interest reinvestment plans, check the following box. x

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.

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 registration statement pursuant to General Instruction I.D. or a post-effective amendment thereto that shall become effective upon filing with the Commission pursuant to Rule 462(e) under the Securities Act, check the following box. x

If this Form is a post-effective amendment to a registration statement filed pursuant to General Instruction I.D. filed to register additional securities or additional classes of securities pursuant to Rule 413(b) under the Securities Act, check the following box.

CALCULATION OF REGISTRATION FEE

	Registered	Per Unit	Offering Price	Fee
Common Stock, \$0.001 par value per share	(1)	(1)	(1)	\$0(2)
Preferred Stock, par value \$0.001 per share	(1)	(1)	(1)	\$0(2)
Debt Securities	(1)	(1)	(1)	\$0(2)
Warrants	(1)	(1)	(1)	\$0(2)
Total	(1)	(1)	(1)	\$0(2)

⁽¹⁾ Omitted pursuant to Form S-3 General Instruction II.E. Such indeterminate number or amount of common stock, preferred stock and debt securities are being registered as may from time to time be offered at indeterminate prices.

⁽²⁾ In accordance with Rules 456(b) and 457(r), the registrant is deferring payment of all of the registration fees.

PROSPECTUS

Common Stock

Preferred Stock

Debt Securities

Warrants

We may, from time to time, offer to sell common stock, preferred stock, debt securities, warrants or any combination of these securities in amounts, at prices and on terms described in one or more supplements to this prospectus. The debt securities, warrants and preferred stock may be convertible into or exchangeable for common or preferred stock or other securities.

This prospectus describes some of the general terms that may apply to an offering of our common stock, preferred stock, debt securities or warrants. The specific terms and any other information relating to a specific offering will be set forth in a post-effective amendment to the registration statement of which this prospectus is a part or in a supplement to this prospectus or may be set forth in one or more documents incorporated by reference in this prospectus.

We and/or selling stockholders may offer and sell common stock, preferred stock, debt securities or warrants to or through one or more underwriters, dealers and agents, or directly to purchasers, on a continuous or delayed basis. The supplements to this prospectus will provide the specific terms of the plan of distribution.

Our common stock trades on the Nasdaq National Market under the symbol NUVO.

Investing in our common stock, preferred stock, debt securities or warrants involves risks. You should review carefully the risks and uncertainties described under the heading Risk Factors contained in any applicable prospectus supplement and under similar headings in the other documents that are incorporated by reference into this prospectus.

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 is June 29, 2006

ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement on Form S-3 that we filed with the Securities and Exchange Commission, or the SEC, utilizing an automatic shelf registration process available to well-known seasoned issuers, as defined in Rule 405 under the Securities Act of 1933, as amended. By using this shelf registration statement process, we may offer and sell from time to time in one or more offerings the common stock, preferred stock, debt securities, warrants or any combination of these securities described in this prospectus. The debt securities, warrants and preferred stock may be convertible into or exercisable or exchangeable for common or preferred stock or other securities. No limit exists on the aggregate number of these securities we may sell pursuant to the registration statement. The specific terms and any other information relating to a specific offering will be set forth in a post-effective amendment to the registration statement of which this prospectus is a part or in a supplement to this prospectus or may be set forth in one or more documents incorporated by reference in this prospectus. We urge you to read carefully both this prospectus and any applicable prospectus supplement, together with the information incorporated herein by reference as described under the heading. Where You Can Find Additional Information, before deciding whether to invest in any of the securities being offered.

You should rely only on the information contained in or incorporated by reference into this prospectus or any applicable prospectus supplement. We have not authorized anyone to provide you with different information. This document may only be used where it is legal to sell these securities. You should not assume that the information contained in this prospectus, or in any prospectus supplement, is accurate as of any date other than its date regardless of the time of delivery of the prospectus or prospectus supplement or any sale of these securities.

This prospectus and the information incorporated herein by reference includes trademarks, service marks and trade names owned by us or other companies. All trademarks, service marks and trade names included or incorporated by reference into this prospectus or any applicable prospectus supplement are the property of their respective owners.

ABOUT NUVELO

References in this prospectus to Nuvelo, we, us and our refer to Nuvelo, Inc., a Delaware corporation, and its subsidiaries. Our principal executive offices are located at 201 Industrial Road, Suite 310, San Carlos, CA 94070-6211, and our telephone number is (650) 517-8000. Our website address is http://www.nuvelo.com. The information contained in, or that can be accessed through, our website is not part of this prospectus.

RISK FACTORS

Investing in our common stock, preferred stock, debt securities or warrants involves risks. You should review carefully the risks and uncertainties described under the heading Risk Factors contained in any applicable prospectus supplement and under similar headings in the other documents that are incorporated by reference into this prospectus. Additional risks not presently known to us or that we currently believe are immaterial may also significantly impair our business operations.

FORWARD-LOOKING STATEMENTS

All statements included or incorporated by reference in this prospectus, other than statements of historical facts, that address activities, events or developments that we intend, expect, project, believe or anticipate will or may occur in the future are forward looking statements. Such statements are typically characterized by terminology such as believe, anticipate, should, intend, plan, will, expect, estimate, strategy, and similar expressions. These statements are based on assumptions and assessments

1

made by our management in light of its experience and its perception of historical trends, current conditions, expected future developments and other factors our management believes to be appropriate. These forward looking statements are subject to a number of risks and uncertainties, including those risks described or incorporated by reference in this prospectus under Risk Factors above, as well as other factors that our management has not yet identified. Any such forward looking statements are not guarantees of future performance and actual results, developments and business decisions may differ from those contemplated by such forward looking statements. We disclaim any duty to update any forward looking statements.

RATIO OF EARNINGS TO FIXED CHARGES

Our earnings were insufficient to cover fixed charges in each of the years in the five-year period ended December 31, 2005 and in the three-month period ended March 31, 2006. Earnings consist of loss from continuing operations before income taxes, extraordinary items, cumulative effect of accounting changes, equity in net losses of affiliates and fixed charges, adjusted for capitalized interest. Fixed charges consist of interest expense, including the interest component of rent expense, and capitalized and amortized premiums, discounts and capitalized expenses related to indebtedness. The extent to which earnings were insufficient to cover fixed charges is as follows:

	2001	Fiscal Ye	ar Ended Dece	2004	2005	Three Months Ended March 31, 2006
Ratio of earnings to fixed charges (1)						
Coverage deficiency	\$ (36,472)	\$ (44,978)	\$ (50,187)	\$ (52,489)	\$ (71,611)	\$ (19,951)

⁽¹⁾ Adjusted earnings, as described above, were insufficient to cover fixed charges in each period. We have not included a ratio of earnings to combined fixed charges and preferred stock dividends because we do not have any preferred stock outstanding.

USE OF PROCEEDS

Except as otherwise provided in any applicable prospectus supplement, we intend to use the net proceeds from the sale of the securities for working capital needs and other general corporate purposes, which may include funding commercialization of alfimeprase, our lead drug candidate, and the advancement of our drug candidates in clinical trials. We expect from time to time to evaluate the acquisition of businesses, products and technologies for which a portion of the net proceeds may be used, although we currently are not planning or negotiating any such transactions. Pending the application of the net proceeds, we expect to invest the proceeds in short-term, interest-bearing, investment-grade securities.

DESCRIPTION OF SECURITIES

We may issue shares of our common stock, shares of our preferred stock, debt securities, warrants or a combination of these securities from time to time, in one or more offerings. We will set forth in the applicable prospectus supplement a description of the terms of the offering, the offering price, the net proceeds to us and other offering material relating to such offering.

LEGAL MATTERS

The validity of the issuance of the shares of our common stock, the shares of our preferred stock, debt securities and/or warrants to be offered by this prospectus will be passed upon for us by our counsel, Cooley Godward LLP, Palo Alto, California.

EXPERTS

The consolidated financial statements of Nuvelo, Inc. as of December 31, 2005 and 2004, and for each of the years in the three-year period ended December 31, 2005, and management s assessment of the effectiveness of internal control over financial reporting as of December 31, 2005 have been incorporated by reference herein and in the registration statement in reliance upon the reports of KPMG LLP, independent registered public accounting firm, incorporated by reference herein, and upon the authority of said firm as experts in accounting and auditing.

WHERE YOU CAN FIND ADDITIONAL INFORMATION

We file annual, quarterly and special reports, proxy statements and other information with the SEC. You may read and copy any document we file at the SEC s Public Reference Room at 100 F Street, N.E., Washington, D.C. 20549. Please call the SEC at 1-800-SEC-0330 for more information about the operation of the public reference room. The SEC maintains an Internet site that contains reports, proxy and information statements, and other information regarding issuers that file electronically with the SEC, including Nuvelo. The SEC s Internet site can be found at http://www.sec.gov.

The SEC allows us to incorporate by reference the information we file with it, which means that we can disclose important information to you by referring you to another document that we have filed separately with the SEC. You should read the information incorporated by reference because it is an important part of this prospectus. We incorporate by reference the following information or documents that we have filed with the SEC (Commission File No. 000-22873):

the description of our common stock, which is registered under Section 12 of the Exchange Act, in our registration statement on Form 8-A, filed with the SEC on July 23, 1997, including any amendments or reports filed for the purpose of updating such description;

our annual report on Form 10-K for the year ended December 31, 2005 filed with the SEC on March 15, 2006 (the 2005 10-K);

the information specifically incorporated by reference into our 2005 Form 10-K from our definitive proxy statement on Schedule 14A filed with the SEC on April 14, 2006;

our quarterly report on Form 10-Q for the quarter ended March 31, 2006 filed with the SEC on May 9, 2006;

our current report on Form 8-K filed with the SEC on January 6, 2006;

our current report on Form 8-K filed with the SEC on January 24, 2006 (except for the information furnished under Item 2.02 or any related exhibit);

our current report on Form 8-K filed with the SEC on January 31, 2006;

our current report on Form 8-K filed with the SEC on February 10, 2006;

our current report on Form 8-K filed with the SEC on March 15, 2006; and

our current report on Form 8-K filed with the SEC on May 25, 2006.

Any information in any of the foregoing documents will automatically be deemed to be modified or superseded to the extent that information in this prospectus or in a later filed document that is incorporated or deemed to be incorporated herein by reference modifies or replaces such

information.

We also incorporate by reference any future filings (other than current reports furnished under Item 2.02 or Item 7.01 of Form 8-K and exhibits filed on such form that are related to such items) made with the SEC

pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act, until we file a post-effective amendment which indicates the termination of the offering of the securities made by this prospectus. Information in such future filings updates and supplements the information provided in this prospectus. Any statements in any such future filings will automatically be deemed to modify and supersede any information in any document we previously filed with the SEC that is incorporated or deemed to be incorporated herein by reference to the extent that statements in the later filed document modify or replace such earlier statements.

We will provide to each person, including any beneficial owner, to whom a prospectus is delivered, without charge upon written or oral request, a copy of any or all of the documents that are incorporated by reference into this prospectus but not delivered with the prospectus, including exhibits which are specifically incorporated by reference into such documents. Requests should be directed to: Investor Relations, Nuvelo, Inc. 201 Industrial Road, Suite 310, San Carlos, CA 94070-6211, and telephone number (650) 517-8000.

PART II

INFORMATION NOT REQUIRED IN THE PROSPECTUS

Item 14. Other Expenses of Issuance and Distribution.

The following table sets forth the estimated costs and expenses, other than underwriting discounts and commissions, payable by the registrant in connection with the offering of the securities being registered. All the amounts shown are estimates.

SEC registration fee	\$	*
Nasdaq National Market listing fee	45	5,000
Accounting fees and expenses	120	0,000
Legal fees and expenses	150	0,000
Trustee s fees	10	0,000
Transfer Agent fees and expenses	5	5,000
Printing and miscellaneous expenses	120	0,000
Total	\$ 450	*000,

^{*} In accordance with Rule 456(b) and 457(r), the registrant is deferring payment of the registration fee for the securities offered by this prospectus, and the registration fee is not included in the total above.

Item 15. Indemnification of Directors and Officers.

Under Section 145 of the Delaware General Corporation Law, we have broad powers to indemnify our directors and officers against liabilities they may incur in such capacities, including liabilities under the Securities Act of 1933, as amended.

Our certificate of incorporation, as amended, provides for the elimination of liability for monetary damages for breach of our directors fiduciary duty of care to us and our stockholders. These provisions do not eliminate our directors duty of care and, in appropriate circumstances, equitable remedies such as injunctive or other forms of non-monetary relief will remain available under Delaware law. In addition, each director will continue to be subject to liability for breach of the director s duty of loyalty to us, for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law, for any transaction from which the director derived an improper personal benefit and for violating Section 174 of the Delaware General Corporation Law. The provision does not affect a director s responsibilities under any other laws, such as the federal securities laws or state or federal environmental laws.

We have entered into indemnification agreements with each of our officers and directors in which we agree to indemnify and hold harmless the officer or director to the fullest extent permitted by applicable law in connection with any threatened, pending or completed action, suit or proceeding, or any inquiry or investigation not initiated by the officer or director, by reason of the fact that such person is or was a director, officer, employee, agent or fiduciary of ours, or is or was serving at our request as a director, officer, employee, agent or fiduciary of another corporation, partnership, joint venture, trust, employee benefit plan or other enterprise, against any and all expenses, judgments, penalties, fines and settlement amounts actually and reasonably incurred by such officer or director or on his or her behalf (including mandatory advancement of expenses), if such person acted in good faith and in a manner which such person believed to be or not opposed to our best interests. The indemnification agreements set forth procedures that apply in the event of a claim for indemnification thereunder.

We also maintain insurance to protect our self and our directors, officers, employees and agents against expenses, liabilities and losses incurred by such persons in connection with their service in the foregoing capacities.

The underwriting agreement, which is exhibit 1.1 to this registration statement, may provide for indemnification by any underwriters of us, our directors, our officers who sign the registration statement and our controlling persons for some liabilities, including liabilities arising under the Securities Act.

II-1

Item 16. Exhibits.

Exhibit Number 1.1	Description of the Document Form of Underwriting Agreement. (1)
2.1	Agreement and Plan of Merger between Hyseq, Inc., Vertical Merger Corp. and Variagenics, Inc. dated November 9, 2002. (5)
2.2	Agreement and Plan of Merger between Nuvelo, Inc. and Nuvelo, Inc., a Nevada corporation and Nuvelo, Inc. s predecessor in interest dated March 19, 2004. (7)
2.3	Stock Purchase Agreement between SBH Genomics, Inc., Radoje Drmanac, Snezana Drmanac, Nuvelo, Inc., and Affymetrix, Inc. dated December 3, 2004. (8)
3.1	Amended and Restated Certificate of Incorporation. (7)
3.2	Amended and Restated Bylaws. (10)
4.1	Form of Common Stock Certificate. (7)
4.2	Rights Agreement between Hyseq, Inc. and U.S. Stock Transfer Corporation dated June 5, 1998. (2)
4.3	Amendment to Rights Agreement between Hyseq, Inc. and U.S. Stock Transfer Corporation dated November 9, 2002. (6)
4.4	Amendment to Rights Agreement between Nuvelo, Inc. and U.S. Stock Transfer Corporation dated March 19, 2004. (7)
4.5	Form of Warrant to purchase 1,491,544 shares of Common Stock of Hyseq, Inc. dated January 8, 2002. (3)
4.6	Form of Warrant dated April 5, 2002. (4)
4.7	Replacement Warrant to purchase 195,130 shares of Common Stock of Nuvelo, Inc. dated January 20, 2005. (9)
4.8	Replacement Warrant to purchase 200,000 shares of Common Stock of Nuvelo, Inc. dated January 20, 2005. (9)
4.9	Replacement Warrant to purchase 50,000 shares (pre split) of Common Stock of Nuvelo, Inc. dated June 7, 2005. (11)
4.10	Warrant to purchase 350,000 shares of Common Stock of Nuvelo, Inc. dated August 4, 2005. (12)
4.11	Registration Rights Agreement by and between Nuvelo, Inc. and Kingsbridge Capital Limited dated August 4, 2005. (12)
4.12	Replacement Warrant to purchase 109,607 shares (pre split) of Common Stock of Nuvelo, Inc. dated July 15, 2005. (13)
4.13	Replacement Warrant to purchase 222,536 shares (pre split) of Common Stock of Nuvelo, Inc. dated July 15, 2005. (13)
4.14	Form of Senior Indenture to be entered into between Nuvelo, Inc. and U.S. Bank National Association.
4.15	Form of Subordinated Indenture to be entered into between Nuvelo, Inc. and U.S. Bank National Association.
4.16	Form of Debt Security. (1)
4.17	Form of Certificate of Designations for Preferred Stock. (1)

Exhibit Number 4.18	Description of the Document Form of Preferred Stock Certificate. (1)
4.19	Form of Warrant. (1)
4.20	Reference is made to Exhibits 3.1 and 3.2
5.1	Opinion of Cooley Godward LLP
12.1	Statement regarding computation of ratios.
23.1	Consent of KPMG LLP, Independent Registered Public Accounting Firm
23.2	Consent of Cooley Godward LLP (included in Exhibit 5.1)
24.1	Power of Attorney (included on signature page)
25.1	Statement of Eligibility of Trustee under the Senior Indenture.
25.2	Statement of Eligibility of Trustee under the Subordinated Indenture.

- (1) To be filed by amendment or as an exhibit to a report of the Registrant pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended, and incorporated herein by reference, if applicable.
- (2) Previously filed with the SEC as an Exhibit to and incorporated herein by reference from Hyseq, Inc. s Form 8-K, filed July 31, 1998, File No. 00-22873.
- (3) Previously filed with the SEC as an Exhibit to and incorporated herein by reference from Hyseq, Inc. s Form 10-K filed April 2, 2001, File No. 000-22873.
- (4) Previously filed with the SEC as an Exhibit to and incorporated herein by reference from Hyseq, Inc. s Form S-3, filed June 14, 2002, File No. 333-90458.
- (5) Previously filed with the SEC as an Exhibit to and incorporated herein by reference from Hyseq, Inc. s Form 8-K, filed November 12, 2002, File No. 000-22873.
- (6) Previously filed with the SEC as an Exhibit to and incorporated herein by reference from Hyseq, Inc. s Form S-4, filed November 27, 2002, File No. 333-101503.
- (7) Previously filed with the SEC as an Exhibit to and incorporated herein by reference from Nuvelo, Inc. s Form 8-K, filed March 26, 2004, File No. 000-22873.
- (8) Previously filed with the SEC as an Exhibit to and incorporated herein by reference from Nuvelo, Inc. s Form 8-K, filed December 9, 2004, File No. 000-22873.
- (9) Previously filed with the SEC as an Exhibit to and incorporated herein by reference from Nuvelo, Inc. s Form 10-K, filed March 16, 2005, File No. 000-22873.
- (10) Previously filed with the SEC as an Exhibit to and incorporated herein by reference from Nuvelo, Inc. s Form 10-Q, filed May 10, 2005, File No. 000-22873.
- (11) Previously filed with the SEC as an Exhibit to and incorporated herein by reference from Nuvelo, Inc. s Form S-3, filed July 14, 2005, File No. 333-126591.
- (12) Previously filed with the SEC as an Exhibit to and incorporated herein by reference from Nuvelo, Inc. s Form 8-K, filed August 5, 2005, File No. 000-22873.
- (13) Previously filed with the SEC as an Exhibit to and incorporated herein by reference from Nuvelo, Inc. s Form S-3, filed September 14, 2005, File No. 333-128316.

Item 17. Undertakings.

The undersigned registrant hereby undertakes:

- (1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:
 - (i) To include any prospectus required by Section 10(a)(3) of the Securities Act of 1933;
 - (ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in the volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Securities and Exchange Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than 20% change in the maximum aggregate offering price set forth in the Calculation of Registration Fee table in the effective registration statement; and
 - (iii) To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement;

provided, however, that paragraphs (1)(i), (1)(ii) and (1)(iii) above do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the Commission by the registrant pursuant to Section 13 and Section 15(d) of the Securities Exchange Act of 1934 that are incorporated by reference in the registration statement, or is contained in a form of prospectus filed pursuant to Rule 424(b) that is part of the registration statement.

- (2) That, for the purpose of determining any liability under the Securities Act of 1933, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.
- (3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.
- (4) That, for the purpose of determining liability under the Securities Act of 1933 to any purchaser:
 - (A) Each prospectus filed by the registrant pursuant to Rule 424(b)(3) shall be deemed to be part of the registration statement as of the date the filed prospectus was deemed part of and included in the registration statement; and
 - (B) Each prospectus required to be filed pursuant to Rule 424(b)(2), (b)(5), or (b)(7) as part of a registration statement in reliance on Rule 430B relating to an offering made pursuant to Rule 415(a)(1)(i), (vii), or (x) for the purpose of providing the information required by Section 10(a) of the Securities Act of 1933 shall be deemed to be part of and included in the registration statement as of the earlier of the date such form of prospectus is first used after effectiveness or the date of the first contract of sale of securities in the offering described in the prospectus. As provided in Rule 430B, for liability purposes of the issuer and any person that is at that date an underwriter, such date shall be deemed to be a new effective date of the registration statement relating to the securities in the registration statement to which that prospectus relates, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof. *Provided, however*, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration

statement will, as to a

purchaser with a time of contract of sale prior to such effective date, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such effective date.

- (5) That, for the purpose of determining liability of the registrant under the Securities Act of 1933 to any purchaser in the initial distribution of the securities, the undersigned registrant undertakes that in a primary offering of securities of the undersigned registrant pursuant to this registration statement, regardless of the underwriting method used to sell the securities to the purchaser, if the securities are offered or sold to such purchaser by means of any of the following communications, the undersigned registrant will be a seller to the purchaser and will be considered to offer or sell such securities to such purchaser:
 - (i) Any preliminary prospectus or prospectus of the undersigned registrant relating to the offering required to be filed pursuant to Rule 424:
 - (ii) Any free writing prospectus relating to the offering prepared by or on behalf of the undersigned registrant or used or referred to by the undersigned registrant;
 - (iii) The portion of any other free writing prospectus relating to the offering containing material information about the undersigned registrant or its securities provided by or on behalf of the undersigned registrant; and
 - (iv) Any other communication that is an offer in the offering made by the undersigned registrant to the purchaser.
- (6) That, for purposes of determining any liability under the Securities Act of 1933, each filing of the registrant s annual report pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934 (and, where applicable, each filing of an employee benefit plan s annual report pursuant to Section 15(d) of the Securities Exchange Act of 1934) that is incorporated by reference in the registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of the securities at that time shall be deemed to be the initial *bona fide* offering thereof.

Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act of 1933 and is, therefore unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Exchange Act and will be governed by the final adjudication of such issue.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-3 and has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of San Carlos, State of California, on June 28, 2006.

NUVELO, INC.

By: /s/ Ted W. Love Ted W. Love

Chairman of the Board and Chief Executive Officer

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Ted W. Love and Gary S. Titus, as his true and lawful attorney-in-fact and agent, with full power of substitution and resubstitution, for such person and in his name, place and stead, in any and all capacities, to sign any or all further amendments (including post-effective amendments) to this registration statement, and to file the same, with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in and about the premises, as fully to all intents and purposes as he might or could do in person, hereby ratifying and confirming all that said attorney-in-fact and agent, or his substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, this registration statement has been signed below by the following persons in the capacities and on the dates indicated.

Signature	Title	Date
/s/ Ted W. Love	Chairman of the Board and Chief Executive Officer (Principal Executive Officer)	June 28, 2006
Ted W. Love		
/s/ Gary S. Titus	Acting Chief Financial Officer, Vice President of Finance and Chief Accounting Officer	June 28, 2006
Gary S. Titus	(Principal Accounting and Financial Officer)	
/s/ James R. Gavin III	Director	June 28, 2006
James R. Gavin III		
/s/ Mary K. Pendergast	Director	June 28, 2006
Mary K. Pendergast		
/s/ Mark L. Perry	Director	June 28, 2006
Mark L. Perry		
/s/ Kimberly Popovits	Director	June 28, 2006
Kimberly Popovits		
/s/ Burton E. Sobel	Director	June 28, 2006

Burton E. Sobel

/s/ Barry L. Zubrow Director June 28, 2006

Barry L. Zubrow

II-6

EXHIBIT INDEX

Exhibit Number 1.1	Description of the Document Form of Underwriting Agreement. (1)
2.1	Agreement and Plan of Merger between Hyseq, Inc., Vertical Merger Corp. and Variagenics, Inc. dated November 9, 2002. (5)
2.2	Agreement and Plan of Merger between Nuvelo, Inc. and Nuvelo, Inc., a Nevada corporation and Nuvelo, Inc. s predecessor in interest dated March 19, 2004. (7)
2.3	Stock Purchase Agreement between SBH Genomics, Inc., Radoje Drmanac, Snezana Drmanac, Nuvelo, Inc., and Affymetrix, Inc. dated December 3, 2004. (8)
3.1	Amended and Restated Certificate of Incorporation. (7)
3.2	Amended and Restated Bylaws. (10)
4.1	Form of Common Stock Certificate. (7)
4.2	Rights Agreement between Hyseq, Inc. and U.S. Stock Transfer Corporation dated June 5, 1998. (2)
4.3	Amendment to Rights Agreement between Hyseq, Inc. and U.S. Stock Transfer Corporation dated November 9, 2002. (6)
4.4	Amendment to Rights Agreement between Nuvelo, Inc. and U.S. Stock Transfer Corporation dated March 19, 2004. (7)
4.5	Form of Warrant to purchase 1,491,544 shares of Common Stock of Hyseq, Inc. dated January 8, 2002. (3)
4.6	Form of Warrant dated April 5, 2002. (4)
4.7	Replacement Warrant to purchase 195,130 shares of Common Stock of Nuvelo, Inc. dated January 20, 2005. (9)
4.8	Replacement Warrant to purchase 200,000 shares of Common Stock of Nuvelo, Inc. dated January 20, 2005. (9)
4.9	Replacement Warrant to purchase 50,000 shares (pre split) of Common Stock of Nuvelo, Inc. dated June 7, 2005. (11)
4.10	Warrant to purchase 350,000 shares of Common Stock of Nuvelo, Inc. dated August 4, 2005. (12)
4.11	Registration Rights Agreement by and between Nuvelo, Inc. and Kingsbridge Capital Limited dated August 4, 2005. (12)
4.12	Replacement Warrant to purchase 109,607 shares (pre split) of Common Stock of Nuvelo, Inc. dated July 15, 2005. (13)
4.13	Replacement Warrant to purchase 222,536 shares (pre split) of Common Stock of Nuvelo, Inc. dated July 15, 2005. (13)
4.14	Form of Senior Indenture to be entered into between Nuvelo, Inc. and U.S. Bank National Association.
4.15	Form of Subordinated Indenture to be entered into between Nuvelo, Inc. and U.S. Bank National Association.
4.16	Form of Debt Security. (1)
4.17	Form of Certificate of Designations for Preferred Stock. (1)
4.18	Form of Preferred Stock Certificate. (1)
4.19	Form of Warrant. (1)
4.20	Reference is made to Exhibits 3.1 and 3.2
5.1	Opinion of Cooley Godward LLP
12.1	Statement regarding computation of ratios.

Exhibit Number 23.1	Description of the Document Consent of KPMG LLP, Independent Registered Public Accounting Firm
23.2	Consent of Cooley Godward LLP (included in Exhibit 5.1)
24.1	Power of Attorney (included on signature page)
25.1	Statement of Eligibility of Trustee under the Senior Indenture.
25.2	Statement of Eligibility of Trustee under the Subordinated Indenture.

- (1) To be filed by amendment or as an exhibit to a report of the Registrant pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended, and incorporated herein by reference, if applicable.
- (2) Previously filed with the SEC as an Exhibit to and incorporated herein by reference from Hyseq, Inc. s Form 8-K, filed July 31, 1998, File No. 00-22873.
- (3) Previously filed with the SEC as an Exhibit to and incorporated herein by reference from Hyseq, Inc. s Form 10-K filed April 2, 2001, File No. 000-22873.
- (4) Previously filed with the SEC as an Exhibit to and incorporated herein by reference from Hyseq, Inc. s Form S-3, filed June 14, 2002, File No. 333-90458.
- (5) Previously filed with the SEC as an Exhibit to and incorporated herein by reference from Hyseq, Inc. s Form 8-K, filed November 12, 2002, File No. 000-22873.
- (6) Previously filed with the SEC as an Exhibit to and incorporated herein by reference from Hyseq, Inc. s Form S-4, filed November 27, 2002, File No. 333-101503.
- (7) Previously filed with the SEC as an Exhibit to and incorporated herein by reference from Nuvelo, Inc. s Form 8-K, filed March 26, 2004, File No. 000-22873.
- (8) Previously filed with the SEC as an Exhibit to and incorporated herein by reference from Nuvelo, Inc. s Form 8-K, filed December 9, 2004, File No. 000-22873.
- (9) Previously filed with the SEC as an Exhibit to and incorporated herein by reference from Nuvelo, Inc. s Form 10-K, filed March 16, 2005, File No. 000-22873.
- (10) Previously filed with the SEC as an Exhibit to and incorporated herein by reference from Nuvelo, Inc. s Form 10-Q, filed May 10, 2005, File No. 000-22873.
- (11) Previously filed with the SEC as an Exhibit to and incorporated herein by reference from Nuvelo, Inc. s Form S-3, filed July 14, 2005, File No. 333-126591.
- (12) Previously filed with the SEC as an Exhibit to and incorporated herein by reference from Nuvelo, Inc. s Form 8-K, filed August 5, 2005, File No. 000-22873.
- (13) Previously filed with the SEC as an Exhibit to and incorporated herein by reference from Nuvelo, Inc. s Form S-3, filed September 14, 2005, File No. 333-128316.