



Contact: Tricia J. Richardson
Novavax, Inc.
240-268-2031

NOVAVAX Announces Publication of a Preclinical Study Demonstrating that a Virus-like Particle Vaccine Provided Protection Against Highly Pathogenic H1N1 and H5N1 Influenza Strains

H1N1 Virus-like Particle (VLP) Vaccine Candidate Based on the 1918 Spanish Influenza Strain Protected Mice and Ferrets Against the Spanish Flu and Highly Pathogenic H5N1 Bird Flu

ROCKVILLE, MD (April 14, 2009) - Novavax, Inc. (NASDAQ:NVAX) today reported preclinical study results showing that an investigational H1N1 virus-like particle (VLP) vaccine based on the 1918 Spanish influenza strain protected against both the Spanish flu and a highly pathogenic H5N1 avian influenza strain. The study, published in the March 25, 2009 online issue of the *Journal of Virology*, was conducted by scientists from the Centers for Disease Control and Prevention (CDC) in Atlanta, GA and Novavax under a Collaborative Research and Development Agreement.

Novavax scientists designed and produced a recombinant VLP vaccine candidate against the 1918 H1N1 influenza strain. This 1918 influenza strain was responsible for more than 50 million deaths worldwide during the great Spanish flu pandemic. Mice and ferrets were vaccinated with VLPs by one of two routes: either by standard intramuscular injection or by administering a small drop of the VLP vaccine in the nose (intranasal immunization). All of the 1918 VLP-immunized animals were protected when exposed to a lethal dose of the 1918 influenza virus, regardless of the route by which the vaccine was administered. Remarkably, animals immunized by the intranasal route were also protected against a lethal dose of a contemporary, highly pathogenic avian influenza subtype H5N1 virus strain, isolated from a fatal human case in 2004 (A/Vietnam/1203/2004 strain).

The H1N1 VLP vaccine candidate was made up of the hemagglutinin (HA), neuraminidase (NA), and matrix 1 (M1) proteins from 1918 Spanish influenza virus strains. These proteins, which were produced in insect cells, formed three-dimensional structures that mimic the 1918 pandemic influenza virus but without the genetic material needed for replication. The mechanism of action by which this H1N1 VLP vaccine candidate provided broad cross-protection is under further study, but the scientists described preliminary evidence that antibody cross-reactivity between the HA and possibly NA proteins of the H1N1 and H5N1 influenza were important.

“Unlike other non-live influenza vaccines, the VLPs are uniquely positioned to stimulate immunity through multiple mechanisms,” said Dr. Penny Heaton, Chief Medical Officer at Novavax. “First, they contain HA protein that is the same structure as the live virus, which may stimulate HA antibodies of several types that not only prevent the virus from attaching to cells but also prevent the virus from fusing with cells. Second, the VLPs contain NA which may stimulate production of antibody that prevents spread of the virus down the respiratory tract. Finally, the structure of the HA and NA proteins and the way in which they are embedded in lipids on the surface of the VLP may activate the innate immune system providing protection against both the H1N1 and H5N1 strains,” said Dr. Heaton.

Although cross protection against influenza strains of the same hemagglutinin or HA type has been achieved through the use of vaccines with adjuvants (e.g., cross-protection against H5N1 A/Vietnam and A/Indonesia strains), protection against strains with different HA types, as shown in this study, has not been reported. Cross-protection against different HA types is highly desirable for pandemic influenza vaccine candidates because it is not possible to predict the strain that may be responsible for the next pandemic with today’s technology. A broadly cross-protective vaccine would be ideal for stockpiling in that it could be administered during the first wave of the pandemic while waiting for manufacture of vaccine specific to the pandemic strain.

Dr. Gale Smith, Vice President of Vaccine Development at Novavax, said, “The discovery that a VLP-based influenza vaccine candidate created through cell-based recombinant technology has the potential to protect against diverse strains of influenza has significant implications for both pre-pandemic and pandemic preparedness. A broadly protective vaccine administered prior to and during the first wave of a pandemic could prevent widespread morbidity and mortality from a newly emerged pandemic influenza strain and allow time for the development of strain-specific vaccines.”

About Novavax

Novavax, Inc. is a clinical-stage biotechnology company creating novel vaccines to address a broad range of infectious diseases worldwide using advanced proprietary VLP technology. The company produces these VLP based, potent, recombinant vaccines utilizing new, and efficient manufacturing approaches. The Company has VLP vaccine candidates against seasonal influenza and potential pandemic influenza strains in phase II clinical development.

This report describes the second of two preclinical studies of Novavax’s investigational H5N1 pandemic influenza vaccine announced this year that have shown different approaches to achieving broad protection against diverse influenza strains. As announced in February, a VLP vaccine with an HA based on several H5 strains showed broad cross-protection against different H5 strains. In the current study, an alternative route of administration resulted in cross-protection against different HA types. Novavax has shown in clinical trials that an H5N1 VLP candidate vaccine given by intramuscular injection is well tolerated and immunogenic in humans. Preclinical research on alternative pandemic influenza VLP vaccine approaches is expected to continue.

Additional information about Novavax is available at www.novavax.com and in the company’s various filings with the Securities and Exchange Commission.

Forward Looking Statement

Statements herein relating to future financial or business performance, conditions or strategies and other financial and business matters, including expectations regarding clinical developments, safety, efficacy and potency of our vaccines, and supply availability are forward-looking statements within the meaning of the Private Securities Litigation Reform Act. Novavax cautions that these forward-looking statements are subject to numerous assumptions, risks and uncertainties, which change over time. Factors that may cause actual results to differ materially from the results discussed in the forward-looking statements or historical experience include risks and uncertainties, including the failure by Novavax to secure and maintain relationships with collaborators; risks relating to the early stage of Novavax's product candidates under development; uncertainties relating to commencing clinical trials and their outcome; risks relating to the supply and commercialization, if any, of Novavax's proposed product candidates; dependence on the efforts of third parties; dependence on intellectual property; competition for clinical resources and patient enrolment from drug candidates in development by other companies with greater resources and visibility, and risks that we may lack the financial resources and access to capital to fund our operations. Further information on the factors and risks that could affect Novavax's business, financial conditions and results of operations, is contained in Novavax's filings with the U.S. Securities and Exchange Commission, which are available at <http://www.sec.gov>. These forward-looking statements speak only as of the date of this press release, and Novavax assumes no duty to update forward-looking statements.

###