Safe harbor statement

Certain information, particularly information relating to future performance and other business matters, including expectations regarding clinical development, our planned use of the proceeds from the offering, market opportunities and anticipated milestones constitute forward-looking statements within the meaning of the Private Securities Litigation Reform Act.

Forward-looking statements may generally contain words such as “believe,” “may,” “could,” “will,” “possible,” “can,” “estimate,” “continue,” “ongoing,” “consider,” “intend,” “indicate,” “plan,” “project,” “expect,” “should,” “would,” or “assume” or variations of such words or other words with similar meanings. Novavax cautions that these forward-looking statements are subject to numerous assumptions, risks and uncertainties that change over time and may cause actual results to differ materially from the results discussed in the forward-looking statements.

Uncertainties include but are not limited to clinical trial results, dependence on third party contractors, competition for clinical resources and patient enrollment and risks that we may lack the financial resources to fund ongoing operations.

Additional information on Risk Factors are contained in Novavax’ filings with the U.S. Securities and Exchange Commission, including our Annual Report on Form 10-K for the year ended December 31, 2018, our Quarterly Reports on Form 10-Q, and our Current Reports on Form 8-K, which are all available at http://www.sec.gov.

Forward-looking statements are based on current expectations and assumptions and currently available data and are neither predictions nor guarantees of future events or performance.

Current results may not be predictive of future results.

You should not place undue reliance on forward-looking statements which speak only as of the date hereof.

The Company does not undertake to update or revise any forward-looking statements after they are made, whether as a result of new information, future events, or otherwise, except as required by applicable law.

Prepare, ResVax, Matrix-M, and NanoFlu are trademarks of Novavax, Inc.
Significant opportunities for value creation

NanoFlu™ Phase 3 clinical trial – data expected by end of first quarter of 2020
  • Solving for poor flu vaccine effectiveness

Recombinant protein nanoparticle technology

Novel Matrix-M™ adjuvant technology (Flu, RSV, and Ebola)

Pharmaceutical partnership discussions ongoing
Pipeline

<table>
<thead>
<tr>
<th>PROGRAM DESCRIPTION</th>
<th>PRECLINICAL</th>
<th>CLINICAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>NanoFlu™ – Nanoparticle Seasonal Influenza Vaccine - Older Adults (65+ yrs)</td>
<td></td>
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<tr>
<td>ResVax™ - RSV F Vaccine - Infants via Maternal Immunization*</td>
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<tr>
<td>RSV F Vaccine - Older Adults (60+ yrs)</td>
<td>Matrix-M</td>
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<tr>
<td>RSV F Vaccine - Pediatrics (6 mos – 5 yrs)</td>
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<tr>
<td>Combination Influenza / RSV F Vaccine - Older Adults (60+ yrs)</td>
<td>Matrix-M</td>
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<tr>
<td>Ebola GP Vaccine</td>
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</table>

*Supported by the $89.1 million grant from the Bill and Melinda Gates Foundation.
NanoFlu program update
Influenza older adult U.S. market opportunity >$2B

Major markets include: U.S., U.K., Italy, France, Spain, Germany
2019 Presidential Executive Order encourages influenza vaccine innovation

Critical policy objectives include:
• Reducing the reliance on egg-based influenza vaccine production
• Expanding alternative methods
• Advancing the development of new, broadly protective vaccine candidates

Recombinant influenza vaccines specifically cited as a necessary innovation with the potential to cut production time and improve efficacy

Novavax supports this order and is advocating for appropriate funding and government resources to deliver on the Administration’s commitment
Flu is not just another cold

Number of deaths

- **40,231**: Motor vehicle accidents, 2017
- **47,600**: Opioid overdose, 2017
- **79,400**: Influenza, 2017-2018 season

Based on data from the Centers for Disease Control and Prevention (2018a), National Safety Council (2018), and Scholl, et al. (2019)
2018-2019 U.S. flu season demonstrates need for improved vaccine effectiveness in older adults

Vaccine effectiveness by strain in older adults

- Overall: 12%
- A/H1N1: 16%
- A/H3N2: 13%
- B Viruses*: 34%

* B Virus VE is across all ages

Centers for Disease Control and Prevention, National Center for Immunization and Respiratory Diseases (NCIRD), November, 2019. Flannery et al, 2019
Two issues contribute to poor flu vaccine effectiveness

Antigenic evolution and drift
Vaccines are derived from recommended strains, but when viruses “drift” – natural genetic evolution – vaccines may not protect as well

Egg adaptation
Viruses are modified to grow better in chicken eggs
Over multiple egg-growth passages, these changes can result in mismatch between vaccine and circulating viruses

Image Source: https://www.fda.gov/ForConsumers/ConsumerUpdates/ucm336267.htm
1MMWR / June 21, 2019 / Vol. 68 / No. 24
NanoFlu: A novel flu vaccine

- Recombinant nanoparticle
- Non-egg based
- Adjuvanted with Matrix-M
- Exact genetic match to recommended vaccine strains

PROVIDES GREATER AND BROADER IMMUNE RESPONSES

~87% of flu vaccine doses are egg-based

Novavax is advancing an improved flu vaccine

NanoFlu is differentiated...

NanoFlu program: Rapid evolution and diversity of H3N2 requires a better vaccine
**NanoFlu Phase 2 clinical trial goals and design**

| **Primary and secondary objectives** | Determine the dose and formulation, demonstrate Matrix-M adjuvant effect, and evaluate the safety and tolerability of a single intramuscular injection of NanoFlu in quadrivalent formulations with or without Matrix-M1 adjuvant in older adults $\geq$ 65 years of age, as compared to 2 licensed influenza vaccines |
| **Design** | Randomized, observer-blinded, active-comparator controlled trial |
| Vaccine strains | • All vaccines contain the WHO-recommended 2018-2019 Northern Hemisphere influenza vaccine strains |
| Stratification | • History of receipt of 2017-2018 influenza vaccine |
| Number of participants | • 1,375 clinically stable adults $\geq$ 65 years of age |
| U.S. study | • Multiple sites |
| Length of study participation | • 1 year |
| Safety assessment | • Through 1 year |
| Immunogenicity assessment | • Hemagglutinin inhibition (HAI) antibody assessment through Day 28 |
Phase 2: NanoFlu had greater wt-HAI responses against A/H3N2 than Fluzone HD

Geometric mean fold titer rise (Day 28 / Day 0) against homologous viruses

Ratio of Day 28 GMTs
40% ↑ p=0.001
Phase 2: NanoFlu had greater wt-HAI responses against A/H3N2 than Fluzone HD

Geometric mean fold titer rise (Day 28 / Day 0) against homologous or drifted A/H3N2 viruses

- Ratio of Day 28 GMTs
  - A/Singapore (H3N2): 40% ↑ p=0.001
  - A/Wisconsin (H3N2): 39% ↑ p<0.001
  - A/Switzerland (H3N2): 18% ↑ p=0.06
NanoFlu cell-mediated immune responses (CMI) substantially greater than Fluzone HD or FluBlok

19-fold improved geometric mean at Day 7 vs. Fluzone HD; p<.001

11-fold improved geometric mean at Day 7 vs. FluBlok HD; p<.001

Cytokines stained: IL-2, IFN-γ, and TNF-α;
Double cytokine+: at least 2 of 3 cytokine+ on intracellular cytokine staining (ICCS)
CMI significance for influenza vaccine protection
How well does it correlate with clinical efficacy?

T-cell responses play an important role in the immune system’s control of influenza virus infections (Clemens 2018)

Influenza-specific CD4+ T and CD8+ T cells (T-cell) have been correlated with clinical protection and reduced severity against influenza infections (Wilkinson 2012, Sridhar 2013)

Higher CD4+ T cell responses previously shown for an adjuvanted TIV versus unadjuvanted TIV; the adjuvanted TIV subsequently demonstrated: (Couch 2014; McElhaney 2013)

- Improved vaccine efficacy against A/H3N2 disease
- Reduction in pneumonia and all-cause death

Next generation influenza vaccines that induce strong T-cell responses could overcome several critical limitations of currently available influenza vaccines (Clemens 2018)
NanoFlu Phase 2 clinical trial conclusions

- Primary endpoint met; Matrix-M adjuvant resulted in significant enhancement of immune responses when compared to the unadjuvanted formulation
- Higher H3N2 hemagglutination inhibition (HAI) antibody responses compared to Fluzone HD and comparable to FluBlok
- Strong T cell responses and higher than Fluzone HD and FluBlok
- NanoFlu was well-tolerated
NanoFlu accelerated approval pathway

FDA accelerated approval pathway for NanoFlu

• Granted for certain biological products that have been studied for their safety and effectiveness in treating serious or life-threatening illnesses

• For seasonal influenza vaccines, the HAI antibody response may be an acceptable surrogate marker of activity that is reasonably likely to predict clinical benefit

Phase 3 trial design

• Non-inferiority immunogenicity clinical trial against a licensed comparator to obtain initial licensure

• Commitment to conduct a post-licensure efficacy trial
# NanoFlu Phase 3 clinical trial goals and design

## Primary objectives
- To demonstrate the non-inferior immunogenicity of NanoFlu, relative to Fluzone® Quadrivalent, in terms of hemagglutination inhibition (HAI) antibody responses to all vaccine homologous influenza strains at Day 28.
- To describe the safety profile of NanoFlu and Fluzone

## Secondary objectives
- To describe the immunogenicity with both egg-propagated virus and wild-type VLP reagents to all four vaccine-homologous influenza strains and to select drifted strains at Day 28.
- To describe the immunogenicity in terms of microneutralization (MN) responses to vaccine-homologous and/or antigenically drifted influenza strains at Day 0 and 28
- To describe the quality and amplitude of cell-mediated immune (CMI) responses in a subset of participants

## Design

**Randomized, observer-blinded, active-comparator controlled trial**

<table>
<thead>
<tr>
<th>Vaccine strains</th>
<th>WHO-recommended 2019-2020 Northern Hemisphere influenza vaccine strains. A/Brisbane (H1N1); A/Kansas (H3N2); B/Maryland (Victoria); B/Phuket (Yamagata)</th>
</tr>
</thead>
</table>
| Investigational and comparator vaccines | Hemagglutinin nanoparticle influenza vaccine, quadrivalent with Matrix-M™ adjuvant (quad-NIV) [NanoFlu]  
Quadrivalent inactivated influenza vaccine (IIV4) [Fluzone] |
| Stratification | History of receipt of 2018-2019 influenza vaccine |
| Participants | 2,650 clinically stable adults ≥65 years of age  
Randomized 1:1 (NanoFlu : Fluzone), Single vaccination at Day 0 |
| Study sites | 19 U.S. sites |
| Length of study participation | 1 year (safety assessment through 1 year) |
Press Release:

Gaithersburg, MD, January 15, 2020 – Novavax, Inc. (NASDAQ: NVAX), a late-stage biotechnology company developing next-generation vaccines for serious infectious diseases, today announced that the U.S. Food and Drug Administration (FDA) has granted Fast Track Designation for NanoFlu™, its recombinant quadrivalent seasonal influenza vaccine candidate, adjuvanted with Matrix-M™, in adults 65 years of age and older.

NanoFlu™ is a novel influenza vaccine designed to provide a rapid and effective response to influenza outbreaks, particularly in the elderly, who are often the most vulnerable to severe outcomes from influenza infection. The vaccine is produced using a recombinant technology to rapidly manufacture large quantities of vaccine components that are not present in currently licensed influenza vaccines.

NanoFlu™ is currently in Phase 3 clinical trials for seniors in the United States, Europe, and Canada, and is expected to be filed for approval in the second half of 2020.

About Novavax and Matrix-M™

Novavax is a late-stage biotechnology company that develops and produces novel vaccines for serious infectious diseases. In addition to NanoFlu™, the company’s quadrivalent seasonal influenza vaccine candidate, adjuvanted with Matrix-M™, is currently in Phase 3 clinical trials in adults 65 years of age and older. The company’s lead clinical development program is a universal flu vaccine, which is expected to enter Phase 3 clinical trials in 2020. Novavax has a diverse and in-depth portfolio of vaccine candidates and is transforming the vaccine industry by enabling access to new and previously unavailable vaccines for the prevention and treatment of serious infectious diseases. For additional information, please visit novavax.com.
ResVax program update
Respiratory syncytial virus (RSV)

Largest unmet need for a vaccine-preventable disease

- Second leading cause of death in children under 1 year of age worldwide\(^1\)
- Leading cause of hospitalization in infants in the U.S., especially in the first 6 months of life\(^2\)
- Maternal immunization offers the best method of protection of infants from RSV disease
- Novavax has the only RSV vaccine with efficacy demonstrated in a Phase 3 clinical trial

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1. Losano R. Lancet. 2012;Dec15;380:2095
RSV in the news

December 31, 2019
Mom urges parents, ‘go with your gut’ after 3-month-old contracts RSV: What you need to know.

January 6, 2020
Chicago: Hospitals report spike in RSV that can be dangerous for young kids

Dublin: Mum’s warning after kiss left her four-month-old baby son fighting for life with deadly [RSV] virus

Heading into the foulest flu month, beware of potentially deadly RSV

January 10, 2018
R.S.V.? She Hadn’t Heard of It. Then Her Child Was Hospitalized

More than 57000 children under 5 are hospitalized with respiratory syncytial virus each year, on average. Many parents have no idea what it is.

January 7, 2020
Doctors warn rise of RSV cases in Oklahoma

January 4, 2020
Cases of highly contagious RSV spiking in Minnesota

January 6, 2020
Parents beware: Pediatricians report spike in RSV

January 6, 2020
Cases of RSV on rise at Cleveland Clinic
ResVax peak revenue opportunity >$1.5B

**Annual Births**
3.9M births in U.S. annually

**Births Post Vaccination**
95% infants born after mothers vaccinated (28-36 weeks gestational age)

**Vaccination Rate**
80-90% vaccination rate after ACIP recommendation

**U.S. Market**
>$750M net revenue for U.S. market

**Total U.S. and Other Major Markets**
(similar modeling)
>$1.5B in additional revenues

**Major markets include:** U.S., U.K., Italy, France, Spain, Germany, Japan, Korea and Taiwan

**Other market opportunities not included:** China, India (growing middle-income population), Eastern Europe, Australia/NZ and Latin America
Learnings from Phase 3 clinical trial

First RSV vaccine to demonstrate efficacy against RSV LRTI hospitalization in a Phase 3 clinical trial

Prevention of RSV LRTI hospitalization and RSV LRTI with severe hypoxemia are key findings

Reduction in all-cause hospitalization and respiratory illness with severe hypoxemia has major public health implications globally

Vaccine appears to be safe in mothers and infants

Reduction in the incidence of serious adverse events (SAEs) diagnosed as pneumonia
# ResVax impact on all-cause clinical pneumonia

49% reduction through the first year of life

<table>
<thead>
<tr>
<th>Endpoint</th>
<th>Time interval</th>
<th>Placebo (N=1562)</th>
<th>Vaccine (N=3010)</th>
<th>Efficacy</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clinical pneumonia reported (all cause)</td>
<td>90 days</td>
<td>51 (3.3%)</td>
<td>45 (1.5%)</td>
<td>54.2%</td>
<td>32.0, 69.2</td>
</tr>
<tr>
<td></td>
<td>180 days</td>
<td>66 (4.2%)</td>
<td>65 (2.2%)</td>
<td>48.9%</td>
<td>28.4, 63.5</td>
</tr>
<tr>
<td></td>
<td>364 days</td>
<td>80 (5.1%)</td>
<td>79 (2.6%)</td>
<td>48.8%</td>
<td>30.5, 62.2</td>
</tr>
</tbody>
</table>

- Clear *post-hoc* observation of efficacy against infant pneumonia through 1 year
- Number-needed-to-vaccinate (NNV) to prevent 1 hospitalized case of pneumonia ~40, (all cause)
- NNV for Prevnar® to prevent 1 case of clinical or X-ray confirmed all-cause pneumonia 47 to 185**

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Data on all SAEs coded as “pneumonia,” excepting “congenital pneumonia” in first 24 hours. Based on safety database as of 09 Jul 19.

**Pneumococcal vaccine NNV calculated from Cutts FT. Lancet 2005; 365:1139 and Palmu A. Vaccine 2018; 36:1826**
ResVax next steps

Continue to receive input from global regulatory agencies on possible pathways to licensure

• U.S.: FDA recommended an additional Phase 3 clinical trial to confirm efficacy
• Europe: The European Medicines Agency (EMA) recommended an additional Phase 3 clinical trial to confirm efficacy

Discussions ongoing with potential partners for further development globally
The power of collaboration through our partners

$89 million in grants

$7 million in grants
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THANK YOU