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, 2017, 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.
Agenda

- Company overview
- ResVax™ program update
- ResVax market opportunities
- The flu problem and NanoFlu™ program update
- Questions
**Pipeline**

<table>
<thead>
<tr>
<th>PROGRAM DESCRIPTION</th>
<th>PRECLINICAL</th>
<th>CLINICAL</th>
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<tbody>
<tr>
<td></td>
<td>Phase 1</td>
<td>Phase 2</td>
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<td></td>
<td>Phase 3</td>
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<tr>
<td><strong>ResVax - RSV F Vaccine</strong> - Infants via Maternal Immunization*</td>
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<tr>
<td>RSV F Vaccine - Older Adults (60+ yrs)</td>
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<tr>
<td>RSV F Vaccine - Pediatrics (6 mos – 5 yrs)</td>
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<tr>
<td><strong>NanoFlu – Nanoparticle Seasonal Influenza Vaccine</strong> - Older Adults (65+ yrs)</td>
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<tr>
<td><strong>Combination Influenza / RSV F Vaccine</strong> - Older Adults (60+ yrs)</td>
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<td><strong>Ebola GP Vaccine</strong></td>
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*Supported by the $89.1 million grant from the Bill and Melinda Gates Foundation.*
ResVax program update
RSV is among the great threats to child health, causing illness and death by inflammatory disease of the lower respiratory tract

H. Cody Meissner, M.D,
Chief of the division of pediatric infectious diseases
Tufts Medical Center, Boston
Key achievements in ResVax development

**Reached enrollment of 4,636 pregnant women in Prepare™ trial, at least 3,000 of whom received ResVax**

- Enables an efficacy analysis; recently reached agreement with FDA that this will be the final analysis used to support our future BLA filing
- Current aggregate number of blinded primary, endpoint cases, along with projected cases, give us confidence that the trial is powered to make a statistically sound efficacy conclusion
- Final efficacy analysis readout expected in 1Q 2019

**Successful informational analysis**

- Significantly de-risked trial outcome
- Analysis included 1,307 infants and met the informational analysis criterion
- Vaccine efficacy at that time estimated in the range of 45% to 100%

**Pre-commercialization efforts**

- Strong preparation efforts for this first-in-class product in a $1.5 billion market
- On-going disease burden information and data sharing with ACIP’s RSV working group

**Other key achievements**

- FDA granted Fast Track designation
- Supported by Bill & Melinda Gates Foundation
### Primary objective

Determine the efficacy of maternal immunization with the RSV F vaccine against medically significant symptomatic RSV lower respiratory tract infection (LRTI) through 90, 120, 150 and 180 days of life in infants

### Design

Randomized, observer-blind, placebo-controlled

<table>
<thead>
<tr>
<th>Number of participants</th>
<th>Minimum of 4,600 third trimester pregnant women and their infants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Global study</td>
<td>87 sites in 11 countries</td>
</tr>
</tbody>
</table>
| Length of study participation | Maternal participants: up to 9 months  
 | | Infant participants: 1 year after delivery |
| 1 intramuscular (IM) Injection of RSV F Vaccine or Placebo at 28-36 weeks Estimated Gestational Age (EGA) | |
| Safety assessment      | Through 6 months post-partum in mothers  
 | | Through 1 year in infants |
| Efficacy assessment    | Active/passive surveillance in mothers and infants  
 | | Confirmation of RSV infection by RT-PCR  
 | | Medically significant tachypnea or pulse oximetry (infants only)  
 | | Confirmation of LRTI |
Primary and secondary endpoints

Primary Endpoint: Medically-significant RSV LRTI

• Presence of RSV detected by RT-PCR during a continuous illness episode, AND

• At least one manifestation of LRTI (cough, nasal flaring, lower chest wall indrawing, subcostal retractions, stridor, rales, rhonchi, wheezing, crackles or observed apnea), AND

• At least one of the following:
  • $\text{SpO}_2 < 95\%$ at sea level or $< 92\%$ at $> 1800m$
  • Respiratory rate $\geq 70$ bpm in infants 0 to 59 days of age or $\geq 60$ bpm in infants $\geq 60$ days of age

Secondary Endpoints

• RSV LRTI with hospitalization

• RSV LRTI with severe hypoxemia
Novavax performed an informational analysis in 4Q 2017

- Novavax wanted to ensure that the ongoing investment in this multi-year Phase 3 clinical trial was justified based on a high probability of a commercially-viable determination of efficacy

- After discussion with the FDA, the analysis included a threshold set with a posterior probability of ≥90% that vaccine efficacy was ≥0%

- Novavax commissioned an independent, unblinded statistician to perform this analysis

- At that point in time, the analysis indicated that the vaccine met or exceeded this threshold
Phase 3 outcome de-risked by successful informational analysis

Above result based on 1,307 infants, assumption of perfect randomization, and simple ratios of event rates
Novavax Reaches Significant Enrollment Milestone in the Prepare™ Phase 3 Trial of its RSV F Vaccine

- Prepare trial is assessing the efficacy of Novavax’ RSV F Vaccine for infants via maternal immunization
- Enrollment of ~4,600 participants enables initiation of interim efficacy analysis
- Topline efficacy data from analysis expected in the first quarter of 2019

GAITHERSBURG, Md., May 07, 2018 (GLOBAL NEWSWIRE) -- Novavax, Inc. (Nasdaq:NVAX) today announced it has reached a significant milestone in the Prepare™ Phase 3 clinical trial of its respiratory syncytial virus F protein recombinant nanoparticle vaccine
What was the basis for FDA agreement that upcoming analysis can be the final analysis?

- We met the agreed minimum number of 3,000 vaccinated mothers for the purpose of safety and efficacy analyses of infants and agreed to follow infants through six months for efficacy before unblinding.

- The current aggregate number of blinded, primary endpoint cases, along with the projected number of cases, provide confidence that the Prepare trial is powered to make a statistically sound efficacy conclusion.
ResVax: pathway to licensure

- 4,636 mothers enrolled
  - Completed 2Q 2018

- 3,000+ infants born to mothers receiving ResVax
  - Completed July 2018

- Final efficacy analysis
  - By 1Q 2019

- BLA/MAA filing
  - By 1Q 2020
ResVax market opportunities
RSV: an important respiratory virus that may lead to severe illness in infants and young children

As the second leading cause of death in children under one year of age worldwide, RSV disease is a significant burden in infants and young children\(^1\)

RSV disease is the leading cause of hospitalization in infants in the U.S. and especially serious from birth through 6 months of age\(^2\)

Maternal immunization offers the best method of protection from RSV disease in infants through the first months of life

Only Novavax has an RSV vaccine in a Phase 3 clinical trial

ResVax represents a greater than $1.5 billion global revenue opportunity

---

1 Losano R. Lancet. 2012;380:2095
While RSV can impact all infants, babies 6 wks-6 mos have the highest rates of hospitalization\(^1\)

"… disguised as a familiar illness but, in reality, a harmful virus that can result in hospitalization or even death… I had no idea what respiratory syncytial virus, or RSV, was, but it was about to rock our world."


\(^1\) Hall CB. Pediatrics 2013;132:e341
All babies are at risk for RSV disease

To substantially reduce the burden of RSV hospitalizations, effective general preventive strategies will be required for all young infants, not just those with risk factors.

- CB Hall, Pediatrics 2013;132:e341–e348

85% or more of RSV hospitalizations should be vaccine preventable

Infants hospitalized by 3 months of age for RSV classified by gestational age

- 78% <34 weeks (PreTerm)
- 15% 35-36 weeks (Late PreTerm)
- 7% >36 weeks (Full Term)

1. McLaurin K. Journal of Perinatology (2016) 00, 1–7 (online)
RSV season recognized by CDC as extending to 7-8 months\(^1\)

<table>
<thead>
<tr>
<th>Season</th>
<th>Onset week</th>
<th>Peak week</th>
<th>Offset week</th>
<th>Season Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014-15</td>
<td>Oct 11</td>
<td>Feb 7</td>
<td>May 9</td>
<td>31 weeks</td>
</tr>
<tr>
<td>2015-16</td>
<td>Oct 17</td>
<td>Feb 13</td>
<td>May 14</td>
<td>31 weeks</td>
</tr>
<tr>
<td>2016-17</td>
<td>Oct 8</td>
<td>Jan 14</td>
<td>Apr 29</td>
<td>30 weeks</td>
</tr>
</tbody>
</table>

This change in methodology [PCR testing and new statistical analysis] has resulted in a relative lengthening of the RSV seasons.

\(1\) Rose, EB., et al., MMWR, January 19, 2018, Vol. 67; No. 2 pg 71; annually, US including HI and FL
Among U.S. infants, RSV is the #1 cause of hospitalization¹

A significant burden to families and the healthcare system, especially in infants <6 months

- 69% of infants <1 year contract RSV
- 77% of these RSV infections occur before 6 months
- 400,000 medical interventions
- 2-4% of infants < 6 months are admitted to the hospital

~2.1M²,³ Infections

~33,400 – 76,155⁴,⁵ Hospital Admissions

~109,000⁴ ER Visits

~260,000⁴ Outpatient Visits

~15-34⁶,⁷ Deaths

~20,000 – 76,155⁴,⁵ Hospital Admissions

~109,000⁴ ER Visits

~260,000⁴ Outpatient Visits

~15-34⁶,⁷ Deaths
Major Markets: Peak revenue opportunity >$1.5 B

Major Markets include: U.S., UK, 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

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
Maternal vaccination becoming a priority for healthcare providers and policy makers

Current vaccines recommended via maternal immunization include:

- Neonatal Tetanus
- Whooping cough (Pertussis)
- Influenza

Initiatives underway to increase vaccination rates of pregnant mothers

- National Vaccine Injury Compensation Program (VICP) – Congress added maternal vaccines and coverage for both baby and mother in 2016 with 21st Century Cures Act
- HHS National Vaccine Advisory Committee (NVAC) - establishes Maternal Immunization Working Group focused on improving vaccination rates
- Maternal Immunization Composite Quality Measure - developed, tested, and is currently being considered by NCQA for inclusion in HEDIS in 2019

ACIP RSV Working Group

- Advisory Committee on Immunization Practices (ACIP) - established RSV Pediatric Working Group, 2017
- First step towards ACIP consideration for recommendation

Key achievements in NanoFlu development

Positive top-line results from Phase 1/2 clinical trial in older adults

• Demonstrated improved immune responses against H3N2 strain compared to egg-based high-dose flu vaccine
• Results presented at World Vaccine Congress in April 2018
• Potential to address one of the world’s largest unmet medical needs
• Publication of a peer-reviewed letter in NEJM

Phase 2 clinical trial design:

• Initiated Phase 2 clinical trial in September 2018
• Confirm dose/formulation to move forward into Phase 3 clinical trial
• Assess effect of Matrix-M adjuvant by comparing adjuvanted and unadjuvanted doses
• Assess effect of quadrivalent formulations compared to trivalent formulations used in our Phase 1/2 clinical trial

FDA discussions

• FDA stated that the accelerated approval pathway could be available for NanoFlu
• Following Phase 2 data, we will meet with FDA to discuss an End of Phase 2 meeting
During the 2017/18 U.S. flu season:

- Vaccine effectiveness against H3N2 for older adults in the U.S. was estimated at 17%\(^1\)\(^2\)

- Roughly 61% of flu-related hospitalizations were associated with A(H3N2) viruses\(^3\)

---

1. Interim Estimates of 2017–18 Seasonal Influenza Vaccine Effectiveness — United States, February 2018. MMWR. February 16, 2018; 67(6);180–185.
2. ACIP Meeting, June 20, 2016: VE update, Dr. Brandon Flannery (CDC/NCIRD), Dr. Yun Lu (FDA)
3. Update: Influenza Activity — United States, 2017-18 Season and Composition of the 2018/2019 Influenza Vaccine. MMWR. June 8, 2018; 67(22); 634-42
H3N2 in the 2017/18 flu season highlights need for better vaccine

Two issues contributing to **MISMATCH** and 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
Rapid evolution and diversity of H3N2

Most common in Australia summer ’17

Most common in U.S. 17/18 season

Circulating H3N2 viruses present in 2017/18 season

Epitope Changes

1 = Vaccine Viruses

Number of significant changes to important regions of the hemagglutinin gene

Egg adaptation issue

Egg-based flu vaccines are predominant
- ~87% of commercial flu vaccines in U.S. manufactured in eggs
- Same manufacturing technology used for over 50 years

Egg propagation can result in mismatch that impacts vaccine effectiveness
- Flu viruses that infect humans are difficult to grow in eggs
- Egg-based viruses must be passaged numerous times to grow better
- Virus changes across these passages result in mutations and potential mismatch that can lead to poor vaccine effectiveness

1. Paules, C. Chasing Seasonal Influenza – The Need for a Universal Influenza Vaccine. NEJM November 29 2017
NanoFlu demonstrates improved immune responses compared to egg-based high-dose flu vaccine.
Not all influenza vaccines are the same

~87% of flu vaccine doses are egg-based\(^1\)

Novavax is advancing an improved flu vaccine

NanoFlu is different

✓ Recombinant nanoparticle
✓ Non-egg based
✓ Adjuvanted with Matrix-M

- Exact genetic match to recommended vaccine strains
- Broader immune response addresses antigenic drift

Significantly higher hemagglutination inhibition (“HAI”) immune responses against the homologous and four generations of drifted wild-type H3N2 strains:

- 64% higher NanoFlu response against forward-drifted strain (A/Singapore)
- 47% higher NanoFlu response against homologous strain (A/Hong Kong)
- 54% higher NanoFlu response against historic strain (A/Switzerland)
- 28-38% higher NanoFlu response against distant historic drifted strain (A/Texas) and (A/Victoria)

In a separate trial, IIV3-HD vs. IIV3-SD demonstrated 80% better ratio of GMTs
- Which translated into 23% better relative efficacy

1. Fluzone-HD [package insert]. Sanofi Pasteur, Swiftwater, PA; 2017
NEJM published NanoFlu clinical trial data

NanoFlu™ Phase 1/2 trial data published in a peer-reviewed letter to the editor in The New England Journal of Medicine

NanoFlu demonstrates significantly improved immune responses against a panel of homologous and drifted A(H3N2) influenza viruses compared to leading licensed egg-based, high-dose flu vaccine in older adults
# NanoFlu Phase 2 clinical trial goals and design

<table>
<thead>
<tr>
<th>Primary and secondary objectives</th>
<th>Design</th>
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<tbody>
<tr>
<td>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 ≥65 years of age, as compared to two licensed influenza vaccines</td>
<td>Randomized, observer-blinded, active-comparator controlled trial</td>
</tr>
<tr>
<td>Vaccine strains</td>
<td>• All vaccines contain the WHO recommended 2018-19 Northern Hemisphere influenza vaccine strains</td>
</tr>
<tr>
<td>Stratification</td>
<td>• History of receipt of 2017-18 influenza vaccine</td>
</tr>
<tr>
<td>Number of participants</td>
<td>• 1,375 clinically-stable adults ≥65 years of age</td>
</tr>
<tr>
<td>U.S. study</td>
<td>• Multiple sites</td>
</tr>
<tr>
<td>Length of study participation</td>
<td>• 1 year</td>
</tr>
<tr>
<td>Safety assessment</td>
<td>• Through 1 year</td>
</tr>
<tr>
<td>Immunogenicity assessment</td>
<td>• Hemagglutinin inhibition (HAI) antibody assessment through Day 28</td>
</tr>
</tbody>
</table>
FDA agreed that the accelerated approval pathway could be available 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

For NanoFlu, this means we could conduct a Phase 3 non-inferiority immunogenicity clinical trial against a licensed comparator to obtain initial licensure, accompanied by a commitment to conduct a post-licensure efficacy trial
NanoFlu completed and next steps

**Phase 1/2 trivalent clinical trial results**
- **Completed**

**Data and Phase 2 quadrivalent clinical trial design with FDA**
- **Completed**

**Phase 2 quadrivalent clinical trial**
- **First subject in 24 Sept 2018**

**Data from Phase 2 clinical trial**
- **Projected for 1Q 2019**

**Phase 3 clinical trial**
- **Projected for 2H 2019**
Thank you