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

1. Company overview
2. RSV F Vaccine IVM program update
3. The flu problem and NanoFlu™ program update
4. Questions
### Pipeline

<table>
<thead>
<tr>
<th></th>
<th>Preclinical</th>
<th>Phase 1</th>
<th>Phase 2</th>
<th>Phase 3</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>RSV</strong></td>
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<tr>
<td>Infants via Maternal Immunization*</td>
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<tr>
<td>Older Adults (60+ yrs)</td>
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<tr>
<td>Pediatrics (6 mos – 5 yrs)</td>
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<tr>
<td><strong>INFLUENZA</strong></td>
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<tr>
<td>Older Adults (NanoFlu)</td>
<td></td>
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<td></td>
<td>Phase 1/2</td>
</tr>
<tr>
<td>Combination Influenza/RSV</td>
<td></td>
<td>Phase 1</td>
<td></td>
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<tr>
<td><strong>EMERGING VIRUSES</strong></td>
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<tr>
<td>Ebola Virus</td>
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<tr>
<td>Zika Virus</td>
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</tbody>
</table>

*Supported by the $89.1 million grant from the Bill and Melinda Gates Foundation.
RSV F Vaccine for Infants Via Maternal Immunization (IVM)
- RSV remains a major unmet medical need for newborns in their first 6 months of life
- Novavax has the only RSV vaccine in Phase 3 clinical trial
- Informational analysis of Phase 3 successful; indicates vaccine is efficacious
- Interim efficacy analysis in 4Q 2018/1Q 2019
- RSV F Vaccine for IVM is a ~$1.5 billion revenue opportunity

Influenza (Flu) Vaccine for Older Adults (OA)
- Efficacy of seasonal flu vaccines is inconsistent largely due to mismatch issues
- Novavax is developing a better, differentiated flu vaccine to capture significant market share
- Positive top-line results in Phase 1/2 clinical trial; demonstrates improved immune responses
- Phase 2 trial expected to begin in 3Q 2018
- Flu vaccine market in 2015 was approximately $3.1B\(^1\) in 7 major markets\(^2\)

\(^1\)PharmaPoint Seasonal Influenza Vaccines Global Drug Forecast and Market Analysis to 2025, October 2016
\(^2\)7 major markets: USA, Japan, Italy, Spain, UK, Germany and France
RSV F Vaccine IVM program update
Respiratory Syncytial Virus (RSV) Burden of Disease (BoD)

All infants ≤ 6 Months old

- **Deaths**: 15 to 34
- **Hospitalization**: ≈ 33,343 to 76,155
  - Rate = 16.9/1000 to 38.6/1000
- **Emergency Department**: ≈ 108,511 ER Visits
  - Rate = 55/1000
- **Outpatient Pediatric Practice**: ≈ 260,428 Office Visits
  - Rate = 132/1000
- **RSV Infection Cases in ≤ 6 mos old**: ≈ 2,090,367 (Year 2016)
- **US Census 2016 All Births**: ≈ 3,945,875

* includes all pre-term infants (<37 wks = 9.85% of All Births)
@ 22% incidence, Symptomatic RSV-LRTI = 459,881

2. Glezen (AJDC, 1986)
3. Hall 2013
4. Hall 2009
5. CDC-Stockman 2012
7. Byington 2015
Rationale for selection of fusion protein as vaccine

F Protein
- Surface glycoprotein key to infectivity
- Generally conserved
- Several broadly neutralizing sites, some highly conserved
- Site II and Site IV highly conserved and associated with clinical efficacy

Frequency of Amino Acid Changes

33 novel RSV subgroup A genomes from strains sampled over the last decade, mapping amino acid substitutions.

# Phase 3 RSV F Vaccine for Infants via Maternal (IVM) Trial Goals and Design

<table>
<thead>
<tr>
<th><strong>Primary Objective</strong></th>
<th>Determine the efficacy of maternal immunization with the RSV F vaccine against symptomatic RSV lower respiratory tract infection (LRTI) with objective measures of medical significance of LRTI from 90-180 days of life in infants</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Design</strong></td>
<td>Randomized, Observer-Blind, Placebo-Controlled</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Number of Participants</strong></th>
<th>Minimum 4,600 women</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Global Study</strong></td>
<td>~80 sites in 11 countries</td>
</tr>
</tbody>
</table>
| **Length of Study Participation** | Maternal Participants: up to 9 months  
Infant Participants: 1 year |
| **1 IM Injection (RSV F Vaccine or Placebo), 28-36 weeks EGA** | |
| **Safety Assessment**      | Through 6 months post-partum in mothers, 1 yr in infants |
| **Immunogenicity Assessment** | Days 0, 14, delivery, delivery + 35, and 180 in mothers  
Cord blood and 6 time points through day 180 in infants |
| **Efficacy Assessment**    | Active/passive surveillance in mothers and infants |
Primary and secondary endpoints

- Primary Endpoint: medically-significant RSV lower respiratory tract infection (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 $> 1800\text{m}$
    - 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
Prepare trial ongoing worldwide

- Currently completing enrollment in Global Year 3 and beginning enrollment in Global Year 4
- ~80 sites in 11 countries
- >4,300 enrolled to date
- Project ~4,600 by 2Q 2018
Milestones for Prepare™ trial

• DSMB
  • No safety concerns raised in 14 sequential meetings
  • Passed first two futility analyses

• Informational Analysis
  • Successful informational analysis in November 2017

• Interim Analysis
  • Enabled by recruitment of 4,600 subjects (including 3,000 active vaccinees)
  • Analysis will be conducted:
    • By DSMB and independent statistician (company blinded)
    • On Per-Protocol endpoints for infants <90 days of age
  • Success = primary endpoint has LBCI >30%
Novavax performed an informational analysis in 4Q 2017

- In a 4-year Phase 3 trial, we wanted to ensure that the ongoing investment in the Phase 3 program was justified based on a high probability of a commercially-viable determination of efficacy.

- Targeted a minimum efficacy threshold against the primary endpoint at day 90 of ~ 40%.
  - Likelihood that other medically significant secondary endpoints would exceed the Vaccine Efficacy (VE) for primary endpoint (e.g., hospitalizations and more severe disease).
  - Large unmet need, no alternative vaccine on the horizon.

- The DSMB statistician performed the analysis/the company remains blinded.
  - The DSMB communicated that the analysis was positive.
Phase 3 outcome de-risked by successful informational analysis

Data from the informational analysis indicate an observed vaccine efficacy in the range of 45-100%.

Vaccine Efficacy (VE) Against Primary Endpoint

- 100%
- 60%
- 40%
- 0%

Informational Analysis Result | 1,307 Enrollees | Assumes 2:1 randomization
Phase 3 / Interim analysis plan

- 3,000+ active infants born
- Interim analysis completed by 1Q 2019 (conducted by DSMB)
- 4,600 mothers treated by 2Q 2018
- BLA filing by 4Q 2019/1Q 2020
RSV F Vaccine IVM market opportunities
Large addressable target population ~8.4M births

Annual direct burden of infant RSV exceeds ~$1.8B

Infant RSV disease burden by country (2014)

Billions of USD

<table>
<thead>
<tr>
<th>Country</th>
<th>Indirect Burden</th>
<th>Direct Burden</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S</td>
<td>2.7</td>
<td></td>
</tr>
<tr>
<td>UK, Italy, Germany, France, Spain</td>
<td>2.1</td>
<td></td>
</tr>
<tr>
<td>Japan</td>
<td>0.5</td>
<td>0.8</td>
</tr>
<tr>
<td>South Korea</td>
<td>0.0</td>
<td>0.8</td>
</tr>
<tr>
<td>Taiwan</td>
<td></td>
<td>0.8</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>5.6</strong></td>
<td><strong>5.6</strong></td>
</tr>
</tbody>
</table>

+Indirect burden measurements considered: Value of statistical life, present value of lost earnings
*Direct burden measurements considered: Hospitalization, office visits, pharmaceutical products, etc.

Source: L.E.K. interviews, research, and analysis
Major markets peak revenue >$1.5B

U.S. Market
$750M in peak revenues

Other Major Markets (similar modeling)
$750M in peak revenues

U.S. Market Detail

- 3.9M births in U.S. annually
- 95% infants born after mother vaccinated (28-36 weeks g.a.)
- 80-90% immunization rate after ACIP recommendation
- > $750M net revenue for U.S. market
Preparing the groundwork for vaccine implementation requires policy and physician support

- **Building on a Proven Strategy**
  - Growing acceptance of maternal vaccination for flu and pertussis among HCPs and mothers
    - Vaccine administration by obstetricians increasingly common
  - American College of Obstetrics and Gynecology now conducts CME-accredited webinar entitled: “Respiratory Syncytial Virus: The Need for a Maternal Immunization Strategy

- **Vaccine Injury Compensation Program (VICP)**
  - Amendment in 21st Century Cures Act: As of December 13, 2016, program covers “both a woman who received a covered vaccine while pregnant and any child who was in utero” under government no-fault insurance program

- **ACIP RSV Working Group**
  - CDC Advisory Committee on Immunization Practices (ACIP) established RSV Working Group, May 2016
  - First step towards ACIP consideration for recommendation
The flu problem and NanoFlu program update
The current flu vaccine problem: A(H3N2) viruses

- This year’s vaccine effectiveness against H3N2 for older adults in the U.S. is estimated at 17%\(^1\)

- During the current 2017/18 U.S. season, roughly 75% of flu-related hospitalizations are associated with A(H3N2) viruses\(^2\)
H3N2 in the current 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
Antigenic drift issue

- All flu viruses are constantly changing and evolving
- This results in antigenically drifted viruses
- Current vaccines may not be able to protect against antigenically drifted viruses
- This is a reason why people get sick even though they are vaccinated

An example:

A/Hong Kong (H3N2) recommended for 2017 flu vaccines in S. Hemisphere

A/Hong Kong drifted and new antigenic strain A/Singapore emerged

A/Singapore was predominant in 2017 flu season in S. Hemisphere

Resulting vaccine effectiveness of 10% against A(H3N2) in Australia

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

Number of significant changes to important regions of the hemagglutinin gene

= Vaccine Viruses

A/Perth
A/Victoria
A/Texas
A/Singapore
A/Hong Kong
A/Switzerland

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
Not all influenza vaccines are the same

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

Novavax is advancing an improved flu vaccine

NanoFlu vaccine is different

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

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

The nanoparticle influenza vaccine and Matrix-M adjuvant

• **Recombinant hemagglutinin (HA) nanoparticle vaccine**
  • Baculovirus/Sf9 insect cell system
  • Express recombinant, full-length, wild-type HA that assembles into HA homotrimers
  • Purified HA homotrimers form higher order nanoparticle structures of 20-40 nm
  • 2 to 9 HA homotrimers per nanoparticle held together by hydrophobic interactions
  • Rapid, high-yield, high purity, production process

• **Potent saponin-based Matrix-M adjuvant**
  • Extracted from bark of *Quillaja saponaria* Molina
  • Enhancement of activated T cell, B cell, and APC populations
  • Induction of functional, and broadly cross-reactive antibodies
  • Induction of polyfunctional T cells, both CD4+ and CD8+
  • Antigen sparing in the context of pandemic influenza
NanoFlu vaccine demonstrates improved immune responses compared to egg-based high-dose flu vaccine
**NanoFlu Phase 1/2 Clinical Trial Goals and Design**

<table>
<thead>
<tr>
<th>Primary Objective</th>
<th>Determine the safety and immunogenicity of NanoFlu vaccine</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Design</strong></td>
<td></td>
</tr>
<tr>
<td>Randomized 1:1:1, stratified by age</td>
<td></td>
</tr>
<tr>
<td>Number of Participants</td>
<td>• 330 clinically-stable adults ages ≥60 years</td>
</tr>
<tr>
<td>U.S. Study</td>
<td></td>
</tr>
<tr>
<td>Length of Study Participation</td>
<td>• 1 year</td>
</tr>
<tr>
<td>Single IM dose on day 0 of</td>
<td>• NanoFlu: 15μg each HA (45μg total) + 50μg Matrix-M, or</td>
</tr>
<tr>
<td></td>
<td>• NanoFlu: 60μg each HA (180μg total) + 50μg Matrix-M, or</td>
</tr>
<tr>
<td></td>
<td>• Licensed egg-based high-dose (180μg total), trivalent, inactivated influenza vaccine (IIV3-HD)</td>
</tr>
<tr>
<td>All 3 vaccines include the same strains</td>
<td>• A/Michigan (H1N1)</td>
</tr>
<tr>
<td></td>
<td>• A/Hong Kong (H3N2)</td>
</tr>
<tr>
<td></td>
<td>• B/Brisbane</td>
</tr>
<tr>
<td>Safety Assessment</td>
<td>• 1 year</td>
</tr>
<tr>
<td>Immunogenicity Assessment</td>
<td>• Day 21</td>
</tr>
</tbody>
</table>
Phase 1/2 clinical trial results

**Homologous HAI results**
Significantly higher hemagglutination inhibition (HAI) antibody responses against H1N1 and H3N2 strains; comparable against B/Brisbane strain. *Addresses egg-adaptation mismatch.*

**Antigenic drift HAI results**
Significantly higher HAI immune responses against multiple mismatched H3N2 strains. *Addresses antigenic drift.*

**Neutralization results**
Correlate with and validate HAI results for H3N2 strains.
HAI antibody response (GMFRs) against wild-type vaccine-homologous strains (2017-18)

<table>
<thead>
<tr>
<th></th>
<th>45µg NanoFlu</th>
<th>180µg NanoFlu</th>
<th>IIV3-HD</th>
</tr>
</thead>
<tbody>
<tr>
<td>A/HongKong H3N2</td>
<td>2.1</td>
<td>2.7</td>
<td>1.9</td>
</tr>
<tr>
<td>A/Michigan H1N1</td>
<td>2.1</td>
<td>3.2</td>
<td>2.6</td>
</tr>
<tr>
<td>B/Brisbane</td>
<td></td>
<td>1.5</td>
<td>1.9</td>
</tr>
</tbody>
</table>

Ratio of Day 21 GMTs
47% ↑ p=0.0056
HAI antibody responses (GMFRs) against 5 generations of drifted wild-type A(H3N2) strains

Geometric Mean Fold Titer Rise (95% CI)

<table>
<thead>
<tr>
<th>Dose (µg)</th>
<th>45</th>
<th>180</th>
<th>IIV3-HD</th>
</tr>
</thead>
<tbody>
<tr>
<td>A/Victoria H3N2</td>
<td>2.3</td>
<td>3.4</td>
<td>3.1</td>
</tr>
<tr>
<td>A/Texas H3N2</td>
<td>2.2</td>
<td>3.0</td>
<td>2.2</td>
</tr>
<tr>
<td>A/Switzerland H3N2</td>
<td>2.2</td>
<td>2.7</td>
<td>2.2</td>
</tr>
<tr>
<td>A/Hong Kong H3N2</td>
<td>2.5</td>
<td>2.5</td>
<td>2.5</td>
</tr>
<tr>
<td>A/Singapore H3N2</td>
<td>2.5</td>
<td>2.7</td>
<td>2.7</td>
</tr>
</tbody>
</table>

A(H3N2) viruses currently circulating in North America

- A/Victoria H3N2
- A/Texas H3N2
- A/Switzerland H3N2
- A/Hong Kong H3N2
- A/Singapore H3N2

Ratio of Day 21 GMTs:
- 38% ↑ p=0.0058
- 28% ↑ p=0.036
- 54% ↑ p=0.0065
- 47% ↑ p=0.0056
- 64% ↑ p=0.0009
Comparison of HAI responses against H3N2 strains

• In our trial, statistically significant increase in the ratio of day 21 geometric mean titers (GMTs) between NanoFlu vaccine and IIV3-HD against three H3N2 strains:
  • 47% higher NanoFlu response against homologous strain (A/Hong Kong)
  • 64% higher NanoFlu response against forward-drifted strain (A/Singapore)
  • 54% higher NanoFlu response against historic strain (A/Switzerland)

• In a separate trial, IIV3-HD vs. IIV3-SD demonstrated 80% better ratio of GMTs
  • Which translated into 23% better relative efficacy¹

1. Fluzone-HD [package insert]. Sanofi Pasteur, Swiftwater, PA; 2017
Rapid evolution and diversity of H3N2 requires a better vaccine

NanoFlu vaccine has potential to provide broader protection against antigenic drift

NanoFlu next steps

- **PUBLISH / PRESENT**
  - Phase 1/2 clinical data results

- **DISCUSS**
  - Data and Phase 2 study design with FDA

- **INITIATE**
  - Phase 2 study
    - *Projected for Fall 2018*

- **CONDUCT**
  - End of Phase 2 meeting with FDA
    - *Projected for 1H 2019*

- **INITIATE**
  - Potential to initiate Phase 3
    - *Projected for 2H 2019*
Thank you