The Janssen Investigational COVID-19 Vaccine Project has been funded in part with federal funds from the Department of Health and Human Services; Office of the Assistant Secretary for Preparedness and Response; Biomedical Advanced Research and Development Authority, under Agreement Number HHSO100201700018C.
Cautions Concerning Forward-Looking Statements

This presentation contains “forward-looking statements” as defined in the Private Securities Litigation Reform Act of 1995 regarding, among other things: future operating and financial performance, product development, market position and business strategy. The reader is cautioned not to rely on these forward-looking statements. These statements are based on current expectations of future events. If underlying assumptions prove inaccurate or known or unknown risks or uncertainties materialize, actual results could vary materially from the expectations and projections of Johnson & Johnson. Risks and uncertainties include, but are not limited to: risks related to the impact of the COVID-19 global pandemic, such as the scope and duration of the outbreak, government actions and restrictive measures implemented in response, material delays and cancellations of medical procedures, supply chain disruptions and other impacts to our business, or on our ability to execute business continuity plans, as a result of the COVID-19 pandemic; economic factors, such as interest rate and currency exchange rate fluctuations; competition, including technological advances, new products and patents attained by competitors; challenges inherent in new product research and development, including uncertainty of clinical success and obtaining regulatory approvals; uncertainty of commercial success for new and existing products; challenges to patents; the impact of patent expirations; the ability of the company to successfully execute strategic plans; the impact of business combinations and divestitures; manufacturing difficulties or delays, internally or within the supply chain; product efficacy or safety concerns resulting in product recalls or regulatory action; significant adverse litigation or government action, including related to product liability claims; changes to applicable laws and regulations, including tax laws and global health care reforms; trends toward health care cost containment; changes in behavior and spending patterns of purchasers of health care products and services; financial instability of international economies and legal systems and sovereign risk; increased scrutiny of the health care industry by government agencies. A further list and descriptions of these risks, uncertainties and other factors can be found in Johnson & Johnson's Annual Report on Form 10-K for the fiscal year ended December 29, 2019, including in the sections captioned “Cautionary Note Regarding Forward-Looking Statements” and “Item 1A. Risk Factors,” in the company's most recently filed Quarterly Report on Form 10-Q and the company's subsequent filings with the Securities and Exchange Commission. Copies of these filings are available online at www.sec.gov, www.jnj.com or on request from Johnson & Johnson. Any forward-looking statement made in this presentation speaks only as of the date of this presentation. Johnson & Johnson does not undertake to update any forward-looking statement as a result of new information or future events or developments.

Cautionary Note on Non-GAAP Financial Measures

This presentation refers to certain non-GAAP financial measures. These non-GAAP financial measures should not be considered replacements for, and should be read together with, the most comparable GAAP financial measures.

A reconciliation of these non-GAAP financial measures to the most directly comparable GAAP financial measures can be found in the accompanying financial schedules of the earnings release and the Investor Relations section of the Company’s website at www.investor.jnj.com.
Proprietary AdVac® Technology Platform is the Foundation of the Janssen Investigational COVID-19 Vaccine

- Replication incompetent human adenovirus 26 (Ad26) vector expressing target antigen
- Induction of humoral and cellular immune responses
  - Humoral: Antibody responses against structural proteins with neutralizing activity and/or other unique functionalities
  - Cellular: CD4-T cell responses with a Th1 signature and CD8 T-cell responses
- No sign of vaccine associated enhanced respiratory disease in preclinical models after breakthrough infection\(^1\)
- Extensive clinical experience with Janssen Ad26-based vaccines (>110,000 participants vaccinated) show these to have a favorable safety & tolerability profile in the populations studied to date\(^1\)
- On 1 July 2020, Johnson & Johnson received approval from the European Medicines Agency for Janssen’s Ad26 based Preventive Ebola Vaccine\(^2\)

1. Data on file Janssen Vaccines & Prevention B.V.
Several Janssen COVID-19 Vaccine Candidates Were Evaluated

Antigens
SARS-CoV-2 Spike protein (S)
Multiple constructs designed for optimal stabilization, expression and antigenicity

Selection criteria
Theoretical considerations
Stabilization
Signal peptide
Expression of antigen
Manufacturability of vaccine
Immunogenicity in preclinical/animal models

Selection of lead vaccine candidate for first-in-human study:
Ad26.COV2.S (encodes a full length membrane-bound S-protein with stabilizing mutations)

Data on file. Janssen Vaccines & Prevention B.V
https://doi.org/10.1038/s41541-020-00243-x

Rhesus macaques were challenged by the intranasal (IN) and intratracheal (IT) routes with 1x10⁵ TCID SARS-CoV-2


BAL, bronchoalveolar lavage; sgmRNA, subgenomic ribonucleic acid; SARS CoV 2, severe acute respiratory syndrome coronavirus 2; TCID, tissue culture infective dose; IN, Intranasal; IT, Intratracheal
Objective: Phase 1/2a trial is evaluating the safety, reactogenicity and immunogenicity of the investigational SARS-CoV-2 vaccine, Ad26.COV2.S in:

- healthy adults aged 18 to 55 years, as well as adults aged 65 years and older
- at 2 dose levels ($5 \times 10^{10}$ vp and $1 \times 10^{11}$ vp)
- administered in 1 dose and 2 dose regimens, as an intramuscular injection

Additional objectives to assess duration of immune response and boostability

Study Design: Randomized placebo-controlled Phase 1/2a study taking place in the U.S. and Belgium (NCT04436276)

Enrollment target: 1045 participants

<table>
<thead>
<tr>
<th>Cohort 1</th>
<th>Cohort 2</th>
<th>Cohort 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>18-55 years</td>
<td>18-55 years</td>
<td>≥ 65 years</td>
</tr>
<tr>
<td>N: 400</td>
<td>N: 270</td>
<td>N: 375</td>
</tr>
</tbody>
</table>

Safety and immunogenicity in younger adults (ongoing)

Duration of immune response and boosting

Safety and immunogenicity in older adults (ongoing)

*NLM Identifier: NCT04436276
### Janssen Investigational COVID-19 Vaccine Phase 1/2a Study: COV1001

**Randomization Based on Dose Level and Dosing Regimen in Cohorts 1 and 3**

<table>
<thead>
<tr>
<th>Group</th>
<th>Dose 1 (Day 1)</th>
<th>Dose 2 (Day 57)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>5×10^{10} vp</td>
<td>5×10^{10} vp</td>
</tr>
<tr>
<td>2</td>
<td>5×10^{10} vp</td>
<td>Placebo</td>
</tr>
<tr>
<td>3</td>
<td>1×10^{11} vp</td>
<td>1×10^{11} vp</td>
</tr>
<tr>
<td>4</td>
<td>1×10^{11} vp</td>
<td>Placebo</td>
</tr>
<tr>
<td>5</td>
<td>Placebo</td>
<td>Placebo</td>
</tr>
</tbody>
</table>

**Interim analysis Day 29, (28 days post Dose 1)**
Safety and immunogenicity (ELISA, VNA, CD4 Th1/Th2, CD8)

**Primary analysis Day 85, (28 days post Dose 2)**
Safety and immunogenicity (ELISA, VNA, CD4 Th1/Th2, CD8)

Study is ongoing as of Sept 2020

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1. NLM Identifier: NCT04436276
   Vp: Viral particle ELISA, enzyme-linked immunosorbent assay; VNA, virus-neutralizing antibody; CD4, a glycoprotein; CD8, a glycoprotein; Th1, T helper Type 1 cell; Th2, T helper Type 2 cell


Interim Analysis: Janssen Investigational COVID-19 Vaccine Phase 1/2a Study: COV1001*
Humoral Immunity after Vaccination with Placebo or Ad26.COV2.S (5x10^{10} vp or 1x10^{11} vp)

1. Enzyme-linked Immunosorbent Assay (ELISA): Log geometric mean titers (GMTs) as illustrated by the horizontal bars and the numbers above each day 29 plot of serum SARS-CoV-2 binding antibodies, measured by ELISA (EU/mL Units per mL EU/mL), at baseline and 28 days post-vaccination, among all participants, according to regimen. Dotted lines indicate the lower limit of quantification (LLOQ) and upper limit of quantification (ULOQ) of the assay, error bars indicate 95% confidence interval (CI). For values below the LLOQ, LLOQ/2 values were plotted.

2. Wild type virus neutralizing antibodies (wtVNA): Log GMTs of serum SARS-CoV-2 neutralizing antibodies, measured by 50% microneutralization assay (ID50 Log GMT) as illustrated by the horizontal bars and the numbers above each day 29 plot, at baseline and 28 days post-vaccination, among a subset of participants, according to regimen. Dotted lines indicate the LLOQ and ULOQ of the assay, error bars indicate 95% CI. For values below the LLOQ, ULOQ/2 values were plotted. Due to timelines constraints vaccine samples were not re-run with further dilution, allowing a ULOQ of 640. HCS samples could be further diluted allowing a higher ULOQ, explaining why several HCS samples have a titer above ULOQ.

*NLM Identifier: NCT04436276
vp: viral particles; ELISA: Enzyme-linked Immunosorbent Assay; wtVNA: wild type viral neutralizing assay; GMT: geometric mean titer; HCS: human convalescent sera
Data on file Janssen Vaccines & Prevention B.V.
**CD4 T cells – Th1**

Cohort 1a: Healthy adults aged 18 – 55

<table>
<thead>
<tr>
<th>Day</th>
<th>N</th>
<th>Median</th>
<th>IFNγ and/or IL-2 not IL-4, IL-5 and/or IL-13</th>
<th>% CD4 T cells expressing</th>
<th>% responders</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>37</td>
<td>&lt;LLOQ 0.08</td>
<td>Placebo</td>
<td>1/15</td>
<td>76%</td>
</tr>
<tr>
<td>15</td>
<td>37</td>
<td>&lt;LLOQ 0.11</td>
<td>Placebo</td>
<td>1/15</td>
<td>83%</td>
</tr>
<tr>
<td>1</td>
<td>71</td>
<td>5x10^10</td>
<td>Placebo</td>
<td>1/15</td>
<td>60%</td>
</tr>
<tr>
<td>15</td>
<td>72</td>
<td>1x10^11</td>
<td>Placebo</td>
<td>1/15</td>
<td>67%</td>
</tr>
</tbody>
</table>

Cohort 3: Healthy adults aged ≥65 years

<table>
<thead>
<tr>
<th>Day</th>
<th>N</th>
<th>Median</th>
<th>IFNγ and/or IL-2 not IL-4, IL-5 and/or IL-13</th>
<th>% CD4 T cells expressing</th>
<th>% responders</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>58</td>
<td>&lt;LLOQ 0.09</td>
<td>Placebo</td>
<td>1/15</td>
<td>76%</td>
</tr>
<tr>
<td>15</td>
<td>53</td>
<td>&lt;LLOQ 0.11</td>
<td>Placebo</td>
<td>1/15</td>
<td>83%</td>
</tr>
<tr>
<td>1</td>
<td>64</td>
<td>5x10^10</td>
<td>Placebo</td>
<td>1/15</td>
<td>60%</td>
</tr>
<tr>
<td>15</td>
<td>54</td>
<td>1x10^11</td>
<td>Placebo</td>
<td>1/15</td>
<td>67%</td>
</tr>
<tr>
<td>1</td>
<td>30</td>
<td>&lt;LLOQ</td>
<td>Placebo</td>
<td>1/15</td>
<td>60%</td>
</tr>
<tr>
<td>15</td>
<td>23</td>
<td>&lt;LLOQ</td>
<td>Placebo</td>
<td>1/15</td>
<td>67%</td>
</tr>
</tbody>
</table>

**CD4 T cells – Th2**

Cohort 1a: Healthy adults aged 18 – 55

<table>
<thead>
<tr>
<th>Day</th>
<th>N</th>
<th>Median</th>
<th>IL-4, IL-5 and/or IL-13</th>
<th>% CD4 T cells expressing</th>
<th>Th1/Th2 ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>37</td>
<td>&lt;LLOQ 0.08</td>
<td>Placebo</td>
<td>1/15</td>
<td>28.9</td>
</tr>
<tr>
<td>15</td>
<td>37</td>
<td>&lt;LLOQ 0.11</td>
<td>Placebo</td>
<td>1/15</td>
<td>28.9</td>
</tr>
<tr>
<td>1</td>
<td>71</td>
<td>5x10^10</td>
<td>Placebo</td>
<td>1/15</td>
<td>28.9</td>
</tr>
<tr>
<td>15</td>
<td>72</td>
<td>1x10^11</td>
<td>Placebo</td>
<td>1/15</td>
<td>28.9</td>
</tr>
</tbody>
</table>

Cohort 3: Healthy adults aged ≥65 years

<table>
<thead>
<tr>
<th>Day</th>
<th>N</th>
<th>Median</th>
<th>IL-4, IL-5 and/or IL-13</th>
<th>% CD4 T cells expressing</th>
<th>Th1/Th2 ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>58</td>
<td>&lt;LLOQ 0.09</td>
<td>Placebo</td>
<td>1/15</td>
<td>20.2</td>
</tr>
<tr>
<td>15</td>
<td>53</td>
<td>&lt;LLOQ 0.11</td>
<td>Placebo</td>
<td>1/15</td>
<td>20.2</td>
</tr>
<tr>
<td>1</td>
<td>64</td>
<td>5x10^10</td>
<td>Placebo</td>
<td>1/15</td>
<td>20.2</td>
</tr>
<tr>
<td>15</td>
<td>54</td>
<td>1x10^11</td>
<td>Placebo</td>
<td>1/15</td>
<td>20.2</td>
</tr>
<tr>
<td>1</td>
<td>30</td>
<td>&lt;LLOQ</td>
<td>Placebo</td>
<td>1/15</td>
<td>20.2</td>
</tr>
<tr>
<td>15</td>
<td>23</td>
<td>&lt;LLOQ</td>
<td>Placebo</td>
<td>1/15</td>
<td>20.2</td>
</tr>
</tbody>
</table>

* NLM Identifier: NCT04436276

vp: viral particles; IFNγ: interferon gamma; IL: Interleukin

Data on file Janssen Vaccines & Prevention B.V.

Expression of Th1 (IFNγ and/or IL-2 but not IL-4, IL-5 and IL-13), and Th2 (IL-4 and/or IL-5 and/or IL-13 and CD40L) cytokines by CD4 T cells was measured by intracellular cytokine staining (ICS). Median (as illustrated by the horizontal bars and the numbers above each day 15 plot) and individual ICS responses to SARS CoV 2 S protein peptide pool in peripheral blood mononuclear cells, at baseline and 15 days post vaccination, among a subset of participants, according to regimen. Percent denotes the percentage of T cells positive for the Th1 or Th2 cytokines. Dotted line indicates the LLOQ.
Interim Analysis: Janssen Investigational COVID-19 Vaccine Phase 1/2a Study: COV1001*
CD8 Responses 14 days after Vaccination with Placebo or Ad26.COV2.S (5x10^{10} vp or 1x10^{11} vp)

**CD8 T cells**

Cohort 1a: Healthy adults aged 18 – 55

Cohort 3: Healthy adults aged ≥65 years

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>37</td>
<td>&lt;LLOQ</td>
<td>&lt;LLOQ</td>
<td>0.07</td>
<td>0.07</td>
</tr>
<tr>
<td>15</td>
<td>37</td>
<td>&lt;LLOQ</td>
<td>1x10^{11}</td>
<td>1x10^{11}</td>
<td>1x10^{11}</td>
</tr>
</tbody>
</table>

% CD8 T cells expressing IFNg and/or IL-2 cytokines

*NLM Identifier: NCT04436276

vp: viral particles; IFNg: interferon gamma; IL: Interleukin

Data on file Janssen Vaccines & Prevention B.V.

Expression of IFNg and/or IL 2 cytokines by CD8 T cells was measured by ICS. Median (as illustrated by the horizontal bars and the numbers above each day 15 plot) and individual ICS responses to SARS CoV 2 S protein peptide pool in peripheral blood mononuclear cells, at baseline and 15 days post vaccination, among a subset of participants, according to regimen. Percent denotes the percentage of CD8 T cells positive for IFNg and/or IL 2 cytokines. Dotted line indicates the LLOQ.

*Data on file*
Interim Analysis: Janssen Investigational COVID-19 Vaccine Phase 1/2a Study: COV1001*

Safety & Reactogenicity Assessment Post-Dose 1 (Blinded – Pooled Groups of 5x10^{10} vp or 1x10^{11} vp, Placebo)

Cohort 1: Healthy adults aged 18 – 55 (n=402)

Cohort 3: Healthy adults aged ≥65 years (n=403)

No grade 4 adverse events reported in any cohort

*NLM Identifier: NCT04436276
Data on file Janssen Vaccines & Prevention B.V.
**Janssen Investigational COVID-19 Vaccine Phase 3 Study: COV3001***


- Locations: Argentina, Brazil, Chile, Colombia, Mexico, Peru, South Africa, and United States
- Continuous, sequential monitoring for safety and efficacy

Healthy adults ≥18 years of age

(≈20% aged 18 to 40 years, ≈30% >60 years of age)

Estimated Enrollment = 60,000

Single IM dose $5 \times 10^{10}$ of Ad26.COV2.S

OR

Placebo

# of participants with first occurrence of molecularly confirmed moderate to severe/critical† COVID-19 w/seronegative status (planned follow up 2 years if feasible)

---

1. Moderate defined as one sign and one symptom from a list of signs, such as heart rate >90 bpm and symptoms such as shortness of breath or cough or 2 symptoms from a list of symptoms or Severe COVID-19 defined in FDA guidance

* NLM Identifier: NCT04505722

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Data on file. Janssen Vaccines & Prevention B.V.
Phase 3 ENSEMBLE Clinical Trial Pause Summary

- Clinical trials to resume recruiting and dosing in the U.S., following an expert and independent investigation of a serious adverse event (SAE) in our Phase 3 ENSEMBLE trial.

- No greater priority than the health and safety of the people we serve every day around the world. We are committed to the safety, well-being and privacy of the participants and all those involved in our trials.

- We plan to disclose clinical trial data in our COVID-19 trials once those data are presented or published at pre-specified milestones and will proactively disclose regulatory trial holds requested by health authorities.

Janssen Investigational COVID-19 Vaccine Anticipated Pandemic Supply Configuration & Storage Conditions

<table>
<thead>
<tr>
<th>Primary packaging</th>
<th>Secondary packaging</th>
<th>Tertiary packaging</th>
</tr>
</thead>
<tbody>
<tr>
<td>2R glass vial*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• No preservative and no reconstitution required</td>
<td>• 10 vials per carton</td>
<td>• 48 cartons per shipper case</td>
</tr>
<tr>
<td>• Blue matte finish (3769) button with silver crimp combination</td>
<td>• 1 product insert per carton</td>
<td>• Carton material: solid bleached sulfate (SBS)</td>
</tr>
<tr>
<td>• High volume 5-dose vial for EUA</td>
<td>• Dimensions:</td>
<td>• Dimensions:</td>
</tr>
<tr>
<td>• 0.5 ml per dose (5x10^10 vp)</td>
<td>• L: 93 mm (3.66 inches)</td>
<td>• L: 383 mm (15.06 inches)</td>
</tr>
<tr>
<td></td>
<td>• W: 38 mm (1.50 inches)</td>
<td>• W: 238 mm (9.38 inches)</td>
</tr>
<tr>
<td></td>
<td>• D: 54 mm (2.13 inches)</td>
<td>• D: 114 mm (4.50 inches)</td>
</tr>
</tbody>
</table>

Anticipated storage conditions (under EUA)

- **Long-term storage‡**: -20°C
  - Up to 2 years

- **End-user storage**: 2-8°C
  - Up to 3 months

- **After first use**: 2-8°C
  - Up to 6 hours

*Blue 3769 button/ silver crimp combination for high volume 5 dose vial;  ‡Long term storage by manufacturer or distributor ONLY – not to be refrozen by end-user

Data on file. Janssen Vaccines & Prevention B.V