# Janssen COVID-19 Vaccine

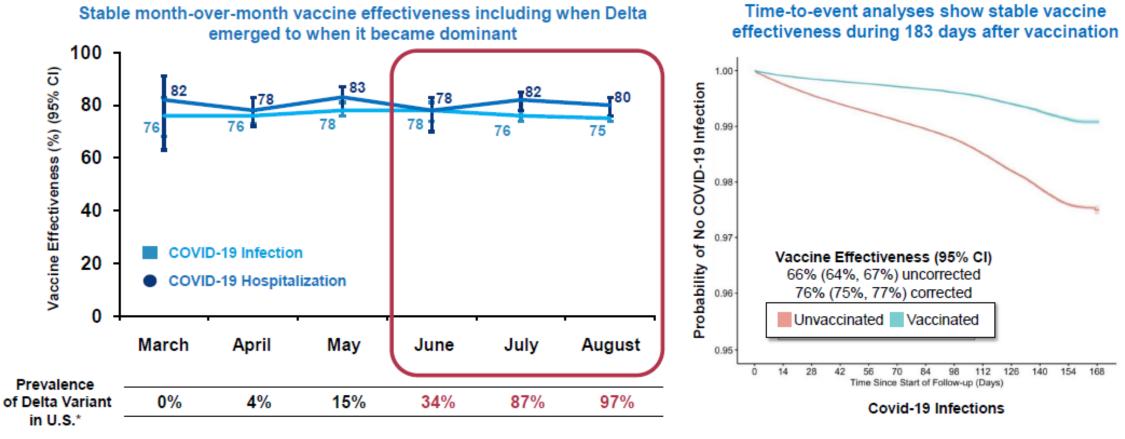
Janssen Pharmaceutical Companies of Johnson & Johnson

Advisory Committee on Immunization Practices December 16, 2021

**Penny Heaton, M.D.** Global Therapeutic Area Head, Vaccines, Janssen Research & Development



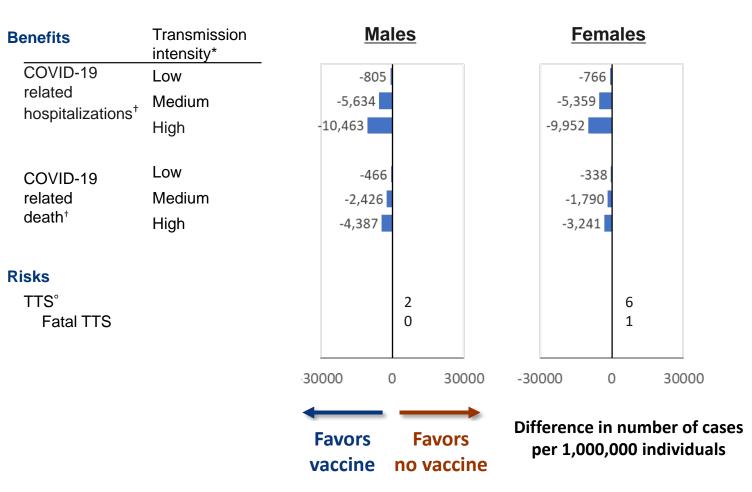
# Month-Over-Month and Kaplan-Meier Plot Demonstrate Good and Durable Vaccine Effectiveness of Single-Dose Vaccine During July-August 2021, When Delta Dominant in US



\*www.nextstrain.org; \*\*Corrected vaccine effectiveness estimates are presented in this slide – Month-over-Month uncorrected vaccine effectiveness estimates are 64%-69% for Covid-19 infections and 68%-75% for Covid-19 related Hospitalization

Median follow-up = 129 days; Schoenfeld residuals show proportional hazards throughout 183 days of follow-up (p=0.53); Uncorrected vaccine effectiveness was equally stable over 183 days

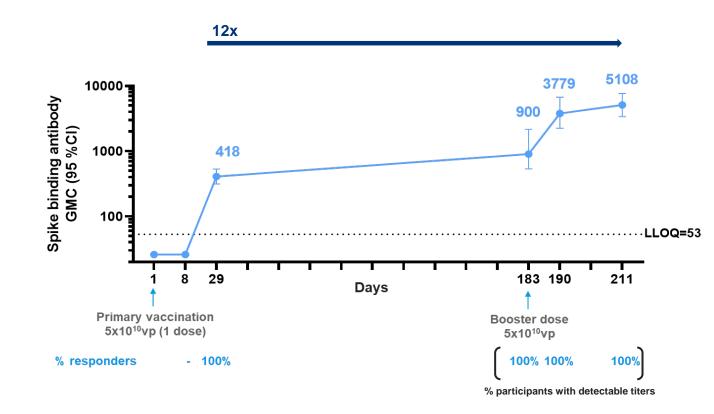
### Benefit-Risk Assessment by Transmission Intensity and Gender: Janssen vaccine (primary dose) vs. no vaccine, Age 18+



- \* Using rate of COVID-19 hospitalization as a proxy (low: week July 3, 2021; high: Jan 1, 2021; medium: Average of high and low)
- † CDC hospitalization and death rates (https://data.cdc.gov/NCHS/Provisional-COVID-19-Death-Counts-by-Sex-Age-and-S/9bhg-hcku (Accessed Dec 13th); 2018 US census population; https://gis.cdc.gov/grasp/covidnet/covid19\_3.html (Accessed Dec 13th))
- US TTS case reporting rates from CDC; assuming a 100% reporting rate; vaccine exposure numbers from CDC
  Assumed 75.5% effectiveness for 12 months, risks are risk period adjusted



# Phase 3 clinical study showed JNJ booster dose increased protection against symptomatic COVID-19 to 94% in the U.S

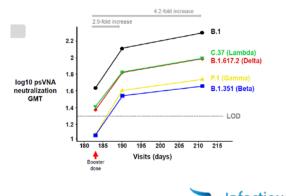


# ENSEMBLE 2 study showed that a booster given ~56 days after primary vaccine provided:

- 100 percent protection against severe/critical COVID-19
- 75 percent protection against symptomatic (moderate to severe/critical) COVID-19 globally

#### A booster generated:

 12-fold increase in antibodies when booster given at six months with breadth against variants





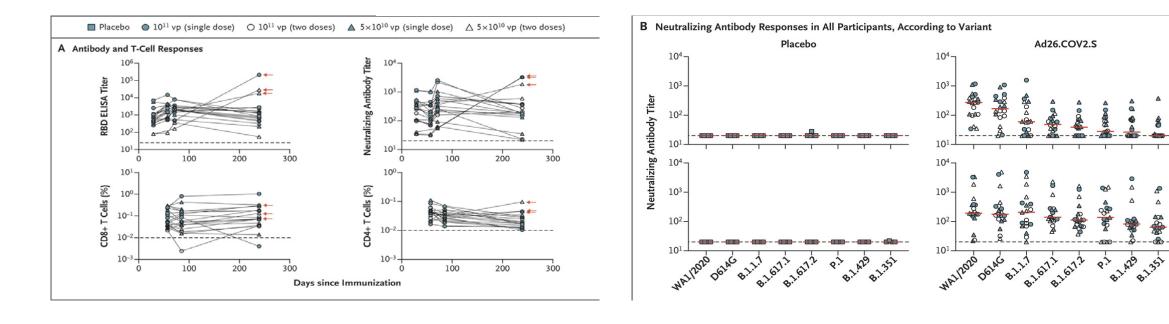
Not approved by FDA, Safety & Efficacy not established

Ab, antibodiy; BAb, Spike binding antibodies; CI, confidence interval; ELISA, enzyme-linked immunosorbent assay; GMC, geometric mean concentrations; LLOQ, lower limit of quantification; ULOQ, upper limit of quantification; PD1, post-dose 1, vp, viral particles. Sadoff J, et al. Available from: https://www.medrxiv.org/content/10.1101/2021.08.25.21262569v1. Accessed August 26, 2021

# Humoral and Cellular Immune Responses after Ad26.COV2.S primary single dose Vaccination



### The NEW ENGLAND JOURNAL of MEDICINE





Day 29

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