COVID-19 Clinical Advisory Task Force

March 3, 2021

The Honorable Andrew M. Cuomo
Governor of New York State
NYS State Capitol Building
Albany, NY 12224

Commissioner Howard A. Zucker, M.D., J.D.
New York State Department of Health
Corning Tower
Empire State Plaza
Albany, NY 12237

Dear Governor Cuomo and Commissioner Zucker,

This letter serves as the formal recommendation of New York State's Clinical Advisory Task Force on COVID-19 Vaccines regarding use of the Janssen Biotech (Johnson & Johnson) COVID -19 vaccine designated Ad26.COV2.S (Ad26) in New York State (NYS). Following review of all current, publicly available safety and efficacy data from clinical trials of the Ad26 vaccine as well as the findings of the U.S. Food and Drug Administration (FDA)'s Vaccines and Related Biological Products Advisory Committee (VRBPAC) and the current context of COVID-19 disease in New York, **the Clinical Advisory Task Force unanimously recommends that the New York State Department of Health (NYSDOH) distribute Ad26 to NYS healthcare providers for administration to individuals age 18 years and older in those populations studied in the Ad26 Phase 3 clinical trial in accordance with Advisory Committee on Immunization Practices (ACIP) recommendations and NYSDOH COVID-19 vaccine allocation plans**.

The Clinical Advisory Task Force, charged with reviewing COVID-19 vaccine candidates, convened via Zoom call on Thursday, February 26, 2021 at 6 PM ET. The purpose was to discuss the Emergency Use Authorization (EUA) application submitted to the U.S. Food and Drug Administration (FDA) by Janssen Biotech (Johnson & Johnson) for their COVID-19 vaccine designated Ad26.COV2.S (Ad26), a replication incompetent adenovirus type 26 vectored vaccine which encodes a stabilized CoV-2 spike protein.

The preclinical and early clinical development milestones were met and a phase 3 trial examining efficacy and safety in persons 18 years of age or older (study 3001) was initiated. There

were 44,325 volunteers were recruited at sites in the United States, South Africa and Brazil; 43,7 83 were randomized to either Ad26 ($5x10^{10}$ replication incompetent viral particles) or placebo, both injected intramuscularly. The co-primary endpoints were vaccine efficacy (VE) in preventing moderate to severe COVID-19 at >14 and >28 days post-vaccination, respectively. Median follow-up was two months. Overall VE was 66.9% and 66.1%, respectively, for the >14 day and >28 day endpoints. Analysis of secondary endpoints and subpopulations yielded the following: VE by country: U.S. 74.4% and 72.0%, South Africa 52.0% and 64.0%, Brazil 66.2% and 68.1%, respectively. Notably, sequencing of positive specimens derived from participants in South Africa revealed that 94.5% of the specimens were SARS-CoV-2 belonging to the B.1.351 lineage (i.e., the South African variant). In an exploratory analysis of asymptomatic/undetected cases, viral acquisition as defined by SARS-CoV-2 antibody seroconversion occurred for 10 persons in the Ad26 vaccine group and 37 persons in the placebo group.

The safety profile was acceptable with local and systemic reactogenicity predominating. Younger participants (age 18-59) exhibited more reactogenicity than older participants (age>60). These were mostly of mild-moderate grade, with quick resolution in 1-2 days.

The sponsor and the FDA provided a clear and thorough picture of the Ad26 vaccine candidate and their conclusions were largely concordant. The data unequivocally demonstrate the efficacy and safety of the Ad26 candidate to date, meeting all of the benchmarks set by the FDA in their guidance document. The VRBPAC voted 22-0 to recommend granting an EUA for the Ad26 Janssen vaccine. Approval by the FDA was granted on February 27, 2021

The Clinical Advisory Task Force enthusiastically supports this action and emphasizes the very high level of protection of this vaccine against serious COVID-19 infections that result in hospitalization, ICU admissions and death. While the VRBPAC decision to recommend approval of the EUA may be straightforward, there are a number of issues/questions that need to be recognized and addressed. These are:

- Where does the Ad26 vaccine fit in the armamentarium vis-à-vis the mRNA vaccines (Moderna and Pfizer)? There are two responses to this question: (1) the imperative remains to vaccinate as many persons as possible as quickly as possible. It has become a race between viral evolution with new variants of concern, and trying to reach herd immunity. In order to do this, vaccine availability has to improve. The immediate utilization of Janssen's Ad26 vaccine in the State's COVID-19 vaccination program will certainly help in this regard; (2) choosing strategies that leverage the logistical advantages that Ad26 possesses (i.e., single dose, routine shipment, and no need for ultra-cold storage); (3) Targeting individuals or groups who are restricted in their mobility (age, illness) or, for any number of reasons, the follow-up for a second injection visit is uncertain or problematic. Examples of circumstances or groups to consider are: rural areas; mobile vans; hospitalized patients for non-COVID-19 -related illnesses just prior to discharge; home bound; transient populations; individuals suffering from homelessness.

- Is the apparent difference in efficacy between Ad26 and the mRNA vaccines a reason to choose the latter over the former? This answer to this requires nuance and explanation with the major points being: caution should be exercised in making cross study comparisons; more data will follow from clinical trials ongoing or planned; and, most importantly, the Ad26 vaccine is highly effective in preventing severe disease, hospitalizations and death. This cannot be minimized as a crucial factor to consider.

- The variant issue. This is a very dynamic area to say the least with new information arriving on a nearly daily basis. Sequencing of isolates from clinical trials and molecular epidemiologic studies are the only way to know what is happening in time to adjust the antigenic moieties if

necessary in vaccines already deployed. Janssen is aware of this and has ramped up its activity to meet this challenge. The reduced efficacy from moderate disease in South Africa may be linked to the spread of the B.1.351 variant but, again, trial participants who received Ad26 vaccine were protected from severe disease and death.

- Efficacy in older individuals with comorbid conditions. More data are needed to define VE with greater precision in this subgroup.

- Is asymptomatic infection prevented? Preliminary data are intriguing and, if confirmed, it could have important implications for interrupting transmission and reducing the size of the viral reservoir in a population.

- Data needed in children and pregnant women. The sponsor is addressing this with trials scheduled to start in the near future.

It will take time to address these questions/issues, and the landscape will only get more complex as additional vaccine candidates enter the clinical arena while SARS-CoV-2 does its best to evade immune control. The Clinical Advisory Task Force unanimously feels that the FDA's issuance of an EUA for the Ad26 vaccine is warranted, as the Ad26 vaccine will provide significant added value to the effort to protect New Yorkers from the devastation of the COVID-19 pandemic. We emphasize the very high level of protection of this vaccine against serious COVID-19 infections that result in hospitalization, ICU admissions and death.

Respectfully,

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