COVID-19 Press Briefing

April 23, 2021
The Vaccination Progress Report

7-day average daily doses administered by week as of 4/22/2021*

Doses per day

*7-day average from March 3 – March 9 was 2.2M
Daily Change in COVID-19 Cases, US
January 22, 2020 – April 21, 2021

TOTAL Cases Reported Since 1/22/20
31,666,546

NEW Cases Reported to CDC on 4/21/21
62,827

Change in 7-Day Case Average
-10.1%

Current 7-Day Case Average (4/15/21 - 4/21/21)
62,596

Prior 7-Day Case Average (4/8/21 - 4/14/21)
69,614

Reported 7-day moving average* of COVID-19 cases has decreased 75% since January 8, 2021

*7-day averages exclude historical cases reported retroactively by states
New Admissions of Patients with Confirmed COVID-19

August 1, 2020 – April 20, 2021

Patients Currently Hospitalized with COVID on 4/20/21
38,876

New Admissions on 4/20/21
5,963

Peak in New Admissions (1/5/21)
17,988

Change in 7-Day Average of New Admissions
+1.6%

Current 7-Day Average of New Admissions (4/14/21 - 4/20/21)
5,631

Prior 7-Day Average of New Admissions (4/7/21 - 4/13/21)
5,541

Reported 7-day moving average of hospitalizations has decreased 66% since January 9, 2021
Daily Change in COVID-19 Deaths, United States

January 22, 2020 – April 21, 2021

TOTAL Deaths Reported Since 1/22/2020
566,494

NEW Deaths Reported to CDC on 4/21/21
875

Change in 7-Day Death Average
-3.7%

Current 7-Day Death Average (4/15/21 - 4/21/21)
691

Prior 7-Day Death Average (4/8/21 - 4/14/21)
717

Forecasted Total Deaths by 5/15/21
579,000 to 596,000
>65% of the Population Age 65 and Older is Fully Vaccinated
65% of the Population Age 65 and Older is Fully Vaccinated

Vaccine Coverage by County*

*County level data are variable for each state
Stay up-to-date on the latest data in your state and county

Vaccine Safety in Pregnant Persons

• >35,000 people who received COVID-19 vaccine before or during pregnancy

• Pregnant people reported similar side effects after vaccination

• No safety concerns for people vaccinated in the third trimester or for their babies

• If you are pregnant, you should be offered and may choose to receive a COVID-19 vaccine

Published Online April 21, 2021
COVID-19: The Therapeutic Landscape

Catharine I. Paules & Anthony S. Fauci

Clinical trial data should guide therapeutics use, results should not be extrapolated between disease stages, and robust studies should be designed to give clinically relevant data.
Pharmacologic Management of Patients with COVID-19

www.covid19treatmentguidelines.nih.gov

Updated April 21, 2021

DISEASE SEVERITY

Not Hospitalized, Mild to Moderate COVID-19

For patients who are not at high risk for disease progression, provide supportive care and symptomatic management (AllB).
For patients who are at high risk of disease progression (as defined by the FDA EUA criteria for treatment with anti-SARS-CoV-2 monoclonal antibodies), use one of the following combinations:
• Bamlanivimab plus etesevimab (Alfa)
• Casirivimab plus imdevimab (Alfa)

Hospitalized but Does Not Require Supplemental Oxygen

There are insufficient data to recommend either for or against the routine use of remdesivir. For patients at high risk of disease progression, the use of remdesivir may be appropriate.

Hospitalized and Requires Supplemental Oxygen

Use one of the following options:
• Remdesivir\(^\text{a,b}\) (e.g., for patients who require minimal supplemental oxygen) (BiiA)
• Dexamethasone\(^\text{a}\) plus remdesivir\(^\text{a,b}\) (e.g., for patients who require increasing amounts of supplemental oxygen) (BiiI)\(^\text{a}\)
• Dexamethasone\(^\text{a}\) (e.g., when combination therapy with remdesivir cannot be used or is not available) (Bii)

Hospitalized and Requires Oxygen Delivery Through a High-Flow Device or Noninvasive Ventilation

Use one of the following options:
• Dexamethasone\(^\text{a}\) (Alf)
• Dexamethasone\(^\text{a}\) plus remdesivir\(^\text{a}\) (BiiI)\(^\text{a}\)
For patients who were recently hospitalized with rapidly increasing oxygen needs and systemic inflammation:
• Add tocilizumab\(^\text{b}\) to one of the two options above (BiiA)

Hospitalized and Requires Invasive Mechanical Ventilation or ECMO

• Dexamethasone\(^\text{a}\) (Alf)
For patients who are within 24 hours of admission to the ICU:
• Dexamethasone\(^\text{a}\) plus tocilizumab\(^\text{b}\) (BiiA)

Rating of Recommendations: A = Strong; B = Moderate; C = Optional
Rating of Evidence: I = One or more randomized trials without major limitations; Ib = Other randomized trials or subgroup analyses of randomized trials; Ib = Nonrandomized trials or observational cohort studies; III = Expert opinion
Case Fatality Rate of the Ongoing COVID-19 Pandemic

Case fatality rate (CFR) = # of confirmed deaths / # of confirmed cases

Source: Our World in Data/JHU CSSE
SARS-CoV-2 Replication Cycle: Targets for Antiviral Therapeutics

Preclinical, Phase 1

- Protease Inhibitors
  - RNA
  - SARS-CoV-2
  - Spike protein
  - ACE2
  - TMPRSS2

- Entry Inhibitors

Preclinical, Phase 1, Phase 2

- Polymerase Inhibitors
  - Viral protease cleavage
  - Polypeptide chains
  - Translation & RNA replication
  - Replication-transcription complex
  - Uncoating/virion RNA translation
  - Golgi apparatus
  - Endoplasmic reticulum
  - Packaging & lysosomal trafficking
  - Virion release

Entry Inhibitors
Large Clinical Trial to Study Repurposed Drugs to Treat COVID-19

- ACTIV-6: Randomized, placebo-controlled, phase 3 trial
- Total n= 13,500 outpatients with mild-to-moderate COVID-19
- Trial will evaluate up to 7 existing prescription and over-the-counter medications that participants will self-administer
- Focus on enrollment of people from minority, rural and other communities significantly affected by COVID-19 who may lack access to academic medical centers
Large NIH Clinical Trial Will Test Polyclonal Antibody Therapeutic for COVID-19

- Phase 2/3 trial (ACTIV-2) evaluating SAB-185 in up to 530 outpatients with mild/moderate COVID-19
- Participants will receive SAB-185, placebo, or another therapeutic currently being evaluated in ACTIV-2
  - BRII-196 + BRII-198 (antibodies)
  - SNG001 (inhalable interferon beta)
  - AZD7442 (long-acting monoclonal antibody combination)
  - Camostat mesylate (oral serine protease inhibitor)
Clinical Trial of Therapeutics for Severely Ill Hospitalized COVID-19 Patients Begins

- Phase 3 randomized, blinded, placebo-controlled trial
- Total n ≈620 hospitalized COVID-19 patients with acute respiratory failure requiring high-flow supplemental oxygen, mechanical ventilation, or extracorporeal membrane oxygenation
- Study evaluating Zyesami (synthetic version of Vasoactive Intestinal Peptide) and remdesivir (alone and in combination) in addition to standard of care