CLINICAL PEARL

- People who are moderately and severely immunocompromised and COVID-19 vaccine booster doses
  - According to recently updated CDC guidance, moderately and severely immunocompromised people aged ≥18 years who completed an mRNA COVID-19 vaccine primary series and received an additional mRNA vaccine dose may receive a single COVID-19 booster dose (Pfizer-BioNTech, Moderna, or Janssen) at least 6 months after completing their third mRNA vaccine dose. In such situations, people who are moderately and severely immunocompromised may receive a total of four COVID-19 vaccine doses.
  - A person who is moderately or severely immunocompromised and has received two doses of an mRNA vaccine and ≥28 days has elapsed since the second dose, should receive an additional mRNA dose immediately (if Moderna COVID-19 vaccine is used, administer 100μg in 0.5ml), followed ≥6 months later by a single COVID-19 vaccine booster dose (if Moderna vaccine booster is used, administer 50μg in 0.25ml).
  - Moderately and severely immunocompromised people aged ≥18 years who received a single dose Janssen COVID-19 vaccine primary series should receive a single COVID-19 booster vaccine (Pfizer-BioNTech, Moderna or Janssen) at least 2 months (8 weeks) after receiving their initial Janssen primary dose. If the Moderna vaccine is used in this circumstance, the booster dose and dose volume should be used (50μg in 0.25ml). A patient’s clinical team is best positioned to determine the appropriate timing of vaccination. A person who received one primary dose of Janssen COVID-19 vaccine should not receive more than two COVID-19 vaccine doses as detailed in Appendix A.

PUBLIC HEALTH UPDATES

- NIH Long-term study of children with COVID-19 begins
- FDA Authorizes Pfizer-BioNTech COVID-19 Vaccine for Emergency Use in Children 5 through 11 Years of Age
- Biden Administration Announces Additional Actions to Increase COVID-19 Screening Testing in Schools and Keep Students Safe
- FDA Takes Additional Actions on the Use of a Booster Dose for COVID-19 Vaccines
- New HHS Actions Add to Biden Administration Efforts to Increase Access to Easy-to-Use Over-the-Counter COVID-19 Tests
- FDA: Ellume Recalls COVID-19 Home Test for Potential False Positive SARS-CoV-2 Test Results
- CDC Confirms New Delta Subtype ‘AY.4.2’ Has Been Identified in The US
- Delta sub-lineage AY.4.2 designated as a Variant Under Investigation by UK Health Security Agency

GUIDELINES/GUIDANCE

- CDC Science Brief: SARS-CoV-2 Infection-induced and Vaccine-induced Immunity
- CDPH Updated Testing Guidance
- CDPH Letter to Local Health Jurisdictions and Providers on Booster Messaging
RESOURCES

• Clinician Outreach and Communication Activity (COCA) Call:
  o Pediatric COVID-19 Vaccines: CDC’s Recommendations for Pfizer-BioNTech COVID-19 Vaccine
    Primary Series in Children 5–11 Years Old
  o What Clinicians, Pharmacists, and Public Health Partners Need to Know about Antibiotic Prescribing
    and COVID-19

• CDC/IDSA COVID-19 Clinician Call:
  o The Latest on COVID-19 Vaccination in Children Ages 5-11
  o COVID-19 Vaccine Boosters, the Immune Compromised & Protecting the Most Vulnerable

• IDSA Media Briefing:
  o COVID-19 Therapies Lessons Learned

• IDSA Podcast:
  o Will Employer Vaccine Mandates Help Bring the COVID-19 Pandemic to an End?
  o Vaccine Boosters Versus The Delta Variant

• Center for Infectious Disease Research and Policy (CIDRAP) Osterholm Update:
  o Episode 74: Implement, Study, Learn
  o Episode 75: Evolving Science
  o Episode 76: Vaccines in the World of Delta
  o Episode 77: A Booster Dose of Humility

• Stanford Department of Medicine Grand Rounds: The Ghost of SARS-CoV 2

• Point of Care Special Considerations in Cardiology: The Era of Covid-19

• Children and COVID-19: State-Level Data Report (New data!)

• GISEAD COVID-19 lineages and variants

• Kaiser Family Foundations
  o KFF COVID-19 Vaccine Monitor: Media and Misinformation
  o KFF COVID-19 Vaccine Monitor: October 2021

• National Academy of Medicine
  o Countering the Pandemic Threat through Global Coordination on Vaccines: The Influenza Imperative
  o Vaccine Research and Development to Advance Pandemic and Seasonal Influenza Preparedness and
    Response: Lessons from COVID-19
  o Public Health Lessons for Non-Vaccine Influenza Interventions: Looking Past COVID-19
  o Globally Resilient Supply Chains for Seasonal and Pandemic Influenza Vaccines

ACADEMIC/RESEARCH PAPERS

• New England Journal of Medicine
  o Evaluation of the BNT162b2 Covid-19 Vaccine in Children 5 to 11 Years of Age
  o BNT162b2 and ChAdOx1 nCoV-19 Vaccine Effectiveness against Death from the Delta Variant
  o Effectiveness of BNT162b2 Vaccine against Delta Variant in Adolescents
  o Covid-19 Vaccination during Pregnancy and First-Trimester Miscarriage
  o Waning Immunity after the BNT162b2 Vaccine in Israel
COVID-19 Digest Issue 66

- Early Treatment for Covid-19 with SARS-CoV-2 Neutralizing Antibody Sotrovimab
- Toxic Effects from Ivermectin Use Associated with Prevention and Treatment of Covid-19

- **medRxiv**
  - Year-long COVID-19 infection reveals within-host evolution of SARS-CoV-2 in a patient with B cell depletion
  - Breastfeeding infants receive neutralizing antibodies and cytokines from mothers immunized with a COVID-19 mRNA vaccine
  - Long-term predictions of humoral immunity after two doses of BNT162b2 and mRNA-1273 vaccines based on dosage, age and sex

- **The Lancet**
  - Effectiveness of a third dose of the BNT162b2 mRNA COVID-19 vaccine for preventing severe outcomes in Israel: an observational study
  - T-cell and antibody responses to first BNT162b2 vaccine dose in previously infected and SARS-CoV-2-naive UK health-care workers: a multicentre prospective cohort study
  - Community transmission and viral load kinetics of the SARS-CoV-2 delta (B.1.617.2) variant in vaccinated and unvaccinated individuals in the UK: a prospective, longitudinal, cohort study
  - Long-term use of immunosuppressive medicines and in-hospital COVID-19 outcomes: a retrospective cohort study using data from the National COVID Cohort Collaborative
  - An observational study of breakthrough SARS-CoV-2 Delta variant infections among vaccinated healthcare workers in Vietnam
  - Efficacy, safety, and lot-to-lot immunogenicity of an inactivated SARS-CoV-2 vaccine (BBV152): interim results of a randomised, double-blind, controlled, phase 3 trial
  - Estimating the early impact of the US COVID-19 vaccination programme on COVID-19 cases, emergency department visits, hospital admissions, and deaths among adults aged 65 years and older: an ecological analysis of national surveillance data
  - Effect of early treatment with fluvoxamine on risk of emergency care and hospitalisation among patients with COVID-19: the TOGETHER randomised, platform clinical trial
  - Efficacy of interferon beta-1a plus remdesivir compared with remdesivir alone in hospitalised adults with COVID-19: a double-bind, randomised, placebo-controlled, phase 3 trial
  - Colchicine in patients admitted to hospital with COVID-19 (RECOVERY): a randomised, controlled, open-label, platform trial
  - Risk factors for poor prognosis in children and adolescents with COVID-19: A systematic review and meta-analysis

- **Pediatrics**
  - Deaths in Children and Adolescents Associated With COVID-19 and MIS-C in the United States

- **JAMA**
  - The Role of Face Masks in the Recognition of Emotions by Preschool Children
  - Experiences of Work-Family Conflict and Mental Health Symptoms by Gender Among Physician Parents During the COVID-19 Pandemic
  - Durability of Antibody Levels After Vaccination With mRNA SARS-CoV-2 Vaccine in Individuals With or Without Prior Infection
  - Analysis of the Effectiveness of the Ad26.COV2.S Adenoviral Vector Vaccine for Preventing COVID-19
  - Age- and Sex-Specific Incidence of Cerebral Venous Sinus Thrombosis Associated With Ad26.COV2.S COVID-19 Vaccination
COVID-19 Digest Issue 66

- Association Between mRNA Vaccination and COVID-19 Hospitalization and Disease Severity
- Vaccination Status and the Detection of SARS-CoV-2 Infection in Health Care Personnel Under Surveillance in Long-term Residential Facilities
- Association of Prior SARS-CoV-2 Infection With Risk of Breakthrough Infection Following mRNA Vaccination in Qatar
- Association of Self-reported High-Risk Allergy History With Allergy Symptoms After COVID-19 Vaccination
- Protective Behaviors Against COVID-19 by Individual Vaccination Status in 12 Countries During the Pandemic
- Quantifying and Benchmarking Disparities in COVID-19 Vaccination Rates by Race and Ethnicity
- Guaranteed Financial Incentives for COVID-19 Vaccination – A Pilot Program in North Carolina
- Association Between COVID-19 Diagnosis and In-Hospital Mortality in Patients Hospitalized With ST-Segment Elevation Myocardial Infarction
- Association of Sleep-Related Hypoxia With Risk of COVID-19 Hospitalizations and Mortality in a Large Integrated Health System
- Incidence of SARS-CoV-2 Infection Among Health Care Personnel, First Responders, and Other Essential Workers During a Prevaccination COVID-19 Surge in Arizona
- Association of Self-reported COVID-19 Infection and SARS-CoV-2 Serology Test Results With Persistent Physical Symptoms Among French Adults During the COVID-19 Pandemic
- Association of University Student Gatherings With Community COVID-19 Infections Before and After the NCAA March Madness Tournament
- Association Between Tumor Necrosis Factor Inhibitors and the Risk of Hospitalization or Death Among Patients With Immune-Mediated Inflammatory Disease and COVID-19
- Racial and Ethnic Disparities in Rates of COVID-19–Associated Hospitalization, Intensive Care Unit Admission, and In-Hospital Death in the United States From March 2020 to February 2021
- Assessment of Cognitive Function in Patients After COVID-19 Infection
- Disparities in COVID-19 Outcomes by Race, Ethnicity, and Socioeconomic Status – A Systematic-Review and Meta-analysis
- Mortality Risk Among Patients With COVID-19 Prescribed Selective Serotonin Reuptake Inhibitor Antidepressants
- Evaluation of COVID-19 Mortality and Adverse Outcomes in US Patients With or Without Cancer

- Journal of Clinical Oncology
  - Immunogenicity and Reactogenicity of SARS-CoV-2 Vaccines in Patients With Cancer: The CANVAX Cohort Study

- Science
  - COVID-19 mRNA vaccines drive differential antibody Fc-functional profiles in pregnant, lactating, and nonpregnant women
  - SARS-CoV-2 vaccine protection and deaths among US veterans during 2021
  - Maternal SARS-CoV-2 infection elicits sexually dimorphic placental immune responses
  - A broadly cross-reactive antibody neutralizes and protects against sarbecovirus challenge in mice
  - Replication and single-cycle delivery of SARS-CoV-2 replicons

- Nature
  - BNT162b2 and mRNA-1273 COVID-19 vaccine effectiveness against the SARS-CoV-2 Delta variant in Qatar
  - Neurological complications after first dose of COVID-19 vaccines and SARS-CoV-2 infection
COVID-19 Digest Issue 66

- A global effort to dissect the human genetic basis of resistance to SARS-CoV-2 infection
- COVID-19 vaccine acceptance among adults in four major US metropolitan areas and nationwide
- Rather than inducing psychological reactance, requiring vaccination strengthens intentions to vaccinate in US populations
- A novel SARS-CoV-2 related coronavirus in bats from Cambodia
- Oil immersed lossless total analysis system for integrated RNA extraction and detection of SARS-CoV-2
- Dexamethasone modulates immature neutrophils and interferon programming in severe COVID-19
- The SARS-CoV-2 main protease Mpro causes microvascular brain pathology by cleaving NEMO in brain endothelial cells
- Imaging intact human organs with local resolution of cellular structures using hierarchical phase-contrast tomography
- Accurate long-range forecasting of COVID-19 mortality in the USA
- Potentially long-lasting effects of the pandemic on scientists

- **PLOS**
  - Anxiety and depression among medical doctors in Catalonia, Italy, and the UK during the COVID-19 pandemic
  - Surviving SARS and living through COVID-19: Healthcare worker mental health outcomes and insights for coping
  - Exhaled nitric oxide detection for diagnosis of COVID-19 in critically ill patients

- **The Journal of Infectious Diseases**
  - Monoclonal Antibody Treatment of Breakthrough COVID-19 in Fully Vaccinated Individuals with High-Risk Comorbidities

- **Open Forum Infectious Diseases**
  - Bamlanivimab efficacy in older and high BMI outpatients with Covid-19 selected for treatment in a lottery-based allocation process

- **Clinical Infectious Diseases**
  - Infectious Diseases Society of America Guidelines on Infection Prevention for Healthcare Personnel Caring for Patients with Suspected or Known COVID-19

- **Infection Control and Hospital Epidemiology**
  - The impact of coronavirus disease 2019 (COVID-19) on healthcare-associated infections in 2020: A summary of data reported to the National Healthcare Safety Network

- **Emerging Infectious Diseases**
  - Effectiveness of BNT162b2 Vaccine in Adolescents during Outbreak of SARS-CoV-2 Delta Variant Infection, Israel, 2021
  - Influenza and SARS-CoV-2 Co-infections in California, USA, September 2020–April 2021
  - COVID-19 Vaccination Coverage, Intent, Knowledge, Attitudes, and Beliefs among Essential Workers, United States
  - Association of Shared Living Spaces and COVID-19 in University Students, Wisconsin, USA, 2020
  - Interventions to Disrupt Coronavirus Disease Transmission at a University, Wisconsin, USA, August–October 2020
  - Probability-Based Estimates of Severe Acute Respiratory Syndrome Coronavirus 2 Seroprevalence and Detection Fraction, Utah, USA
  - Effectiveness of Abbott BinaxNOW Rapid Antigen Test for Detection of SARS-CoV-2 Infections in Outbreak among Horse Racetrack Workers, California, USA
Postmortem Antigen-Detecting Rapid Diagnostic Tests to Predict Infectivity of SARS-CoV-2–Associated Death

Correlation of SARS-CoV-2 Subgenomic RNA with Antigen Detection in Nasal Midturbinate Swab Specimens

Policy Review and Modeling Analysis of Mitigation Measures for Coronavirus Disease Epidemic Control, Health System, and Disease Burden, South Korea

Real-Time Genomic Surveillance for SARS-CoV-2 Variants of Concern, Uruguay

Bordetella hinzii Pneumonia and Bacteremia in a Patient with SARS-CoV-2 Infection

Seroprevalence of SARS-CoV-2–Specific Antibodies among Quarantined Close Contacts of COVID-19 Patients, Faroe Islands, 2020

Rapid Increase in SARS-CoV-2 P.1 Lineage Leading to Codominance with B.1.1.7 Lineage, British Columbia, Canada, January–April 2021

Mutations Associated with SARS-CoV-2 Variants of Concern, Benin, Early 2021

Prevalence of SARS-CoV-2 Antibodies after First 6 Months of COVID-19 Pandemic, Portugal

Co-infection with Legionella and SARS-CoV-2, France, March 2020

Resurgence of Respiratory Syncytial Virus Infections during COVID-19 Pandemic, Tokyo, Japan

Online Registry of COVID-19–Associated Mucormycosis Cases, India, 2021

Socioeconomic Patterns of COVID-19 Clusters in Low-Incidence City, Hong Kong

Fatal Co-infections with SARS-CoV-2 and Legionella pneumophila, England

**Annals of Internal Medicine**

Comparative Effectiveness of an Automated Text Messaging Service for Monitoring COVID-19 at Home

**BMJ**

Effects of covid-19 pandemic on life expectancy and premature mortality in 2020: time series analysis in 37 countries

The influence of gender and ethnicity on facemasks and respiratory protective equipment fit: a systematic review and meta-analysis

**The Journal of Clinical Investigation**

Chitinase 3-like-1 is a therapeutic target that mediates the effects of aging in COVID-19

**Influenza and Other Respiratory Viruses**

Clinical manifestations of COVID-19 differ by age and obesity status

**Thrombosis Research**

Lupus anticoagulant is an independent risk factor for non-thrombotic in-hospital mortality in COVID-19 patients

**Journal of Thrombosis and Thrombolysis**

The role of lipoprotein(a) in coronavirus disease 2019 (COVID-19) with relation to development of severe acute kidney injury

**European Journal of Clinical Investigation**

Myocardial injury in patients with SARS-CoV-2 pneumonia: pivotal role of inflammation in COVID-19

**Cardiovascular Research**

Low-molecular-weight heparin use in coronavirus disease 2019 is associated with curtailed viral persistence: a retrospective multicentre observational study

**JACC Cardiovascular Imaging**

Prospective Case-Control Study of Cardiovascular Abnormalities 6 Months Following Mild COVID-19 in Healthcare Workers
COVID-19 Digest Issue 66

- **JAC – Antimicrobial Resistance**
  - A retrospective antibiotic prescribing assessment and examination of potential antibiotic stewardship targets in patients with COVID-19

- **Scandinavian Journal of Work, Environment and Health**
  - COVID-19 mortality across occupations and secondary risks for elderly individuals in the household: A population register-based study

- **Metabolism, Obesity and Diabetes**
  - Audit of Clinical Outcomes with Dexamethasone in Patients Hospitalised with COVID-19

- **bioRxiv**
  - Plant-based production of SARS-CoV-2 antigens for use in a subunit vaccine
  - Multiple spillovers and onward transmission of SARS-CoV-2 in free-living and captive white-tailed deer

- **Vet Record**
  - Infection with SARS-CoV-2 variant B.1.1.7 detected in a group of dogs and cats with suspected myocarditis

**MMWR**

- The Advisory Committee on Immunization Practices’ Interim Recommendations for Additional Primary and Booster Doses of COVID-19 Vaccines — United States, 2021
- Effectiveness of 2-Dose Vaccination with mRNA COVID-19 Vaccines Against COVID-19—Associated Hospitalizations Among Immunocompromised Adults — Nine States, January–September 2021
- Effectiveness of Pfizer-BioNTech mRNA Vaccination Against COVID-19 Hospitalization Among Persons Aged 12–18 Years — United States, June–September 2021
- Laboratory-Confirmed COVID-19 Among Adults Hospitalized with COVID-19—Like Illness with Infection-Induced or mRNA Vaccine-Induced SARS-CoV-2 Immunity — Nine States, January–September 2021
- Severity of Disease Among Adults Hospitalized with Laboratory-Confirmed COVID-19 Before and During the Period of SARS-CoV-2 B.1.617.2 (Delta) Predominance — COVID-NET, 14 States, January–August 2021
- Influenza Vaccinations During the COVID-19 Pandemic — 11 U.S. Jurisdictions, September–December 2020

**HOT OFF THE (LAY) PRESS**

- New York Times
  - The F.D.A plans to authorize Pfizer boosters for all adults as soon as Thursday
  - Pfizer will allow its Covid treatment pill to be made and sold inexpensively in 95 poorer nations. A similar deal was made by Merck last month.
  - The White House plans to spend billions expanding Covid vaccine manufacturing in the U.S. and boosting supplies in the developing world.
  - A federal appeals court kept in place a block on the Biden administration’s Covid vaccine mandate for workers at large companies.
  - Dozens of N.Y.C. sanitation workers were suspended during an inquiry into the use of fake vaccine cards.
  - U.S. Covid upswing
COVID-19 Digest Issue 66

- How Bad Could California's Winter Coronavirus Surge Get?
- She Died With Long Covid. Should Her Organs Have Been Donated?
- The first known Covid patient was a vendor at a Wuhan market, a new report claims. The finding may revive debate over how the pandemic began.
- Small Needles and Short Lines: Biden’s Plan to Vaccinate Young Children
- Merck Will Share Formula for its Covid Pill With Poor Countries
- Britain approved Merck's antiviral drug molnupiravir, making it the first pill to be endorsed for treating Covid patients.

- Medicines Patent Pool Press Releases
  - The Medicines Patent Pool (MPP) and MSD enter into licence agreement for molnupiravir, an investigational oral antiviral COVID-19 medicine, to increase broad access in low- and middle-income countries

- European Medicines Agency
  - EMA starts rolling review of molnupiravir

- Reuters
  - U.S. brokers J&J-COVAX deal to send vaccines to conflict zones - Blinken
  - Netherlands returns to partial lockdown amid COVID-19 surge

- The Washington Post
  - Europe's surge in coronavirus cases prompts restrictions, lockdowns
  - Biden administration to buy Pfizer antiviral pills for 10 million people, hoping to transform pandemic
  - Top Biden health officials push to make coronavirus booster shots available to all adults
  - Booster shots are most popular in poorly vaccinated states where coronavirus rages
  - Pfizer-BioNTech expected to seek authorization for coronavirus booster for people 18 and older
  - In secret vaccine contracts with governments, Pfizer took hard line in push for profit, report says
  - CDC finds immunity from vaccines is more consistent than from infection, but both last at least six months
  - Vaccine eligibility for mood disorders underscores elevated covid risk

- Politico
  - Biden plan to make unvaccinated workers pay for Covid testing could backfire

- Business Insider
  - Democrats are asking Biden to mandate that airlines require passengers to be fully vaxxed for COVID-19 before flying

- AP News
  - 19 states sue Biden administration over COVID vaccine rule
  - Africa tries to end vaccine inequity by replicating its own
  - China to start vaccinating children to age 3 as cases spread

- Bloomberg
  - Chinese Virus Expert Launches Scathing Attack on Covid Zero Push
  - Pediatric Hospital Visits Plunge in U.S. As Schools Reopen

- Axios
  - Axios-Ipsos poll: No widespread COVID school backlash

- BMJ News
  - Long covid: One in seven children may still have symptoms 15 weeks after infection, data show

- US News
  - Biden Administration Presses Schools to Provide COVID Shots to Kids
  - US Intel Doesn't Expect to Determine Origins of COVID-19
COVID-19 Digest Issue 66

- **The Wall Street Journal**
  - FDA Delays Moderna Covid-19 Vaccine for Adolescents to Review Rare Myocarditis Side Effect
  - Challenges to Biden Vaccine Rules Will Come Before Ohio-Based U.S. Appeals Court
- **NBC News**
  - Biden administration announces plan to speed authorization of at-home Covid tests
- **The Hill**
  - Critics say Congress falling short on pandemic preparedness
- **The Economists**
  - People with covid jabs have been less likely to die of other causes
- **Live Science**
  - A version of this gene doubles the risk of dying from COVID-19
- **Scientific American**
  - COVID Vaccine Makers Prepare for a Variant Worse Than Delta
- **Science Alert**
  - A Massive Global Syringe Shortage Could Hit in 2022, WHO Warns
  - Needle-Free Vaccine Patches Are Just a Matter of Time Now, Latest Results Indicate
- **EurekAlert**
  - HSS study identifies risk factors for “long-haul” COVID-19 in people with rheumatic diseases
  - Depression and anxiety worsened during the pandemic, putting patients at higher heart disease risk, study finds
  - Hospitals sustained huge financial losses from lost revenues during COVID-19 pandemic as patients lost timely access to surgical services
- **CNN**
  - How Puerto Rico became the most vaccinated place in America
- **NPR**
  - All adults can get a COVID vaccine booster in California, not just those CDC listed
  - Health workers in China are killing pets while their owners are in quarantine
  - Times Square will welcome back vaccinated revelers this New Year’s Eve
- **The Atlantic**
  - Is Moderna Really Better Than Pfizer—Or Is It Just a Higher Dose?
- **Moderna Press Releases**
  - Moderna Announces Positive Top Line Data from Phase 2/3 Study of COVID-19 Vaccine in Children 6 to 11 Years of Age
  - Moderna Provides Update on Timing of U.S. Emergency Use Authorization of its COVID-19 Vaccine for Adolescents
  - Moderna Files to Expand the Conditional Marketing Authorization for its COVID-19 Vaccine in the European Union to Include Children Ages 6-11 Years
- **Pfizer Press Releases**
  - PFIZER’S NOVEL COVID-19 ORAL ANTIVIRAL TREATMENT CANDIDATE REDUCED RISK OF HOSPITALIZATION OR DEATH BY 89% IN INTERIM ANALYSIS OF PHASE 2/3 EPIC-HR STUDY
  - PFIZER AND BIONTECH TO PROVIDE U.S. GOVERNMENT AN ADDITIONAL 50 MILLION PEDIATRIC DOSES OF COVID-19 VACCINE TO SUPPORT FURTHER PREPAREDNESS FOR FUTURE NEEDS
  - PFIZER AND BIONTECH ANNOUNCE PHASE 3 TRIAL DATA SHOWING HIGH EFFICACY OF A BOOSTER DOSE OF THEIR COVID-19 VACCINE
COVID-19 Digest Issue 66

- **PFIZER AND THE MEDICINES PATENT POOL (MPP) SIGN LICENSING AGREEMENT FOR COVID-19 ORAL ANTIVIRAL TREATMENT CANDIDATE TO EXPAND ACCESS IN LOW- AND MIDDLE-INCOME COUNTRIES**

- **BioNTech Press Releases**
  - BioNTech Plans to Initiate the Construction of an mRNA Vaccine Manufacturing Facility in Africa in mid-2022

- **Valneva Press Releases**
  - Valneva Reports Positive Phase 3 Results for Inactivated, Adjuvanted COVID-19 Vaccine Candidate VLA2001

- **Los Angeles Times**
  - Confusion reigns over who is eligible for boosters, prompting California to take action
  - ‘Winter is coming,’ Gov. Newsom warns as California’s COVID threat persists
  - What a COVID-19 pill could mean for California

- **The San Diego Union Tribune**
  - San Diego scientists are working on a vaccine against all coronaviruses. Yes, all of them

**EPIDEMIOLOGY UPDATES**

- **CDC COVID Data Tracker**
  - COVID-19 Vaccinations in the United States

- **US Leads the World in Confirmed COVID-19 Cases**
  - Johns Hopkins University Center for Systems Science and Engineering Dashboard Website

- **Johns Hopkins COVID-19 in the USA**
  - daily summary of key data on COVID-19 in the U.S.

- **California COVID-19 by the numbers**
  - are available on the CDPH Website and the NYT Map and Table (includes data by county)
    - California COVID-19 Statewide Update as of November 19, 2021

- **San Mateo County COVID-19 Dashboard**
- **Santa Clara County COVID-19 Dashboard**

**ADDITIONAL COVID-19 RESOURCES**

- **San Mateo County COVID-19 Guidance and Resources for Clinicians and Facilities – COVID-19 Digests**
- **Palo Alto Online tracking the coronavirus in San Mateo and Santa Clara counties**
- **California COVID-19 Data and Tools**
- **CDPH COVID-19 Assessment and Modeling Tool**
- **California Department of Corrections and Rehabilitations Population COVID-19 Tracking Dashboards**
- **CDC Interactive Serology Dashboard for Commercial Laboratory Surveys**
- **HHS Coronavirus Data Hub**
- **COVID-19 Nursing Home Data**