

Archived Editions (COVID-19 Genomics and Precision Public Health Weekly Update)

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COVID-19 Genomics and Precision Public Health Weekly Update Content

- Pathogen and Human Genomics Studies
- Non-Genomics Precision Health Studies
- News, Reviews and Commentaries

Pathogen and Human Genomics Studies

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Sims Joshua J et al. PLoS pathogens 2021 7 (7) e1009544

SARS-CoV-2 variants have emerged with enhanced pathogenicity and transmissibility, and escape from pre-existing immunity, suggesting first-generation vaccines and monoclonal antibodies may now be less effective. Here we present an approach for preventing clinical sequelae and the spread of SARS-CoV-2 variants. First, we affinity matured an angiotensin-converting enzyme 2 (ACE2) decoy protein, achieving 1000-fold binding improvements that extend across a wide range of

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During the first wave of the pandemic period, we changed from regular clinic visits to telephone visit calls to monitor our patients' health condition and adherence to physiotherapy and physical exercise.

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- SARS-CoV-2 Vaccine Effectiveness in a High-Risk National Population in a Real-World Setting (<https://www.acpjournals.org/doi/10.7326/M21-1577>)
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This study included all veterans who had testing for SARS-CoV-2 infection between 15 December 2020 and 4 March 2021 and no confirmed infection before 15 December 2020. Overall vaccine effectiveness 7 or more days after the second dose was 97.1% (95% CI, 96.6% to 97.5%). Effectiveness was 96.2% (CI, 95.5% to 96.9%) for the Pfizer-BioNTech BNT-162b2 vaccine and 98.2% (CI, 97.5% to 98.6%) for the Moderna mRNA-1273 vaccine. Effectiveness remained above 95% regardless of age group, sex, race, or presence of comorbidities.

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