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### Selected Publications on SARS-CoV-2 by EVBC Members

Omicron escapes most therapeutic monoclonal antibodies and to a large extent vaccine-elicited antibodies. (Nature: [10.1038/s41586-021-04389-z](https://doi.org/10.1038/s41586-021-04389-z))

SARS-CoV-2 Beta variant infection elicits potent lineage-specific and cross-reactive antibodies. (Science: [10.1126/science.abm5835](https://doi.org/10.1126/science.abm5835))

Omicron viruses remain sensitive to a broad range of anti-SARS-CoV-2 drugs (and candidates) and are less effective at antagonizing the host cell interferon response. (Cell Res: [10.1038/s41422-022-00619-9](https://doi.org/10.1038/s41422-022-00619-9))

SARS-CoV-2 can directly infect kidney cells and induce cell injury with subsequent fibrosis, explaining both acute kidney injury in COVID-19 patients and the development of chronic kidney disease in long COVID. (Cell Stem Cell: [10.1016/j.stem.2021.12.010](https://doi.org/10.1016/j.stem.2021.12.010))

Prediction which existing amino acid mutations in SARS-CoV-2 might contribute to future variants of concern. (Sci Transl Med: [10.1126/scitranslmed.abk3445](https://doi.org/10.1126/scitranslmed.abk3445))

Variability in antigen-detecting rapid diagnostic test performance is partially explained by variable viral loads in population evaluated over the course of the pandemic. (EBioMedicine: [10.1016/j.ebiom.2021.103774](https://doi.org/10.1016/j.ebiom.2021.103774))

Heterologous COVID-19 vaccination may confer some cross-protection against endemic seasonal coronaviruses. (Clin Infect Dis: [10.1093/cid/ciac057](https://doi.org/10.1093/cid/ciac057))

Infection with virus defective in N7-methylation protects mice from lethal SARS-CoV-2, suggesting that the N7-methylase might be a useful target in drug and vaccine development. (mBio: [10.1128/mbio.03662-21](https://doi.org/10.1128/mbio.03662-21))

SARS-CoV-2 triggers interferon-stimulated gene expression much stronger than SARS-CoV. (J Proteome Res: [10.1021/acs.jproteome.1c00783](https://doi.org/10.1021/acs.jproteome.1c00783))

HiSpike is a method for high-throughput cost effective targeted next generation sequencing of the spike gene to provide affordable sequencing options for widespread, near real-time monitoring of spike gene variants. (Front Med: [10.3389/fmed.2021.798130](https://doi.org/10.3389/fmed.2021.798130))

#### Reviews / Commentaries

How animal model research is playing a key role to evaluate VOC virulence, transmission and immune escape. (PLoS Pathog: [10.1371/journal.ppat.1010161](https://doi.org/10.1371/journal.ppat.1010161))

#### Preprints

Omicron vaccine-breakthrough infections did not show elevated infectious viral titres compared to Delta, suggesting that other mechanisms than increased viral load contribute to the high infectiousness of Omicron. (medRxiv: [10.1101/2022.01.10.22269010](https://doi.org/10.1101/2022.01.10.22269010))

Omicron variant of SARS-CoV-2 exhibits an increased resilience to the antiviral type I interferon response. (bioRxiv: [10.1101/2022.01.20.476754](https://doi.org/10.1101/2022.01.20.476754))

Given the evident epidemic growth advantages of Omicron, it is crucial to determine how such complex and highly adaptive mutation constellations were assembled within the Omicron S-gene, and why the early stages of this assembly process went completely undetected. (bioRxiv: [10.1101/2022.01.14.476382](https://doi.org/10.1101/2022.01.14.476382))

Cattle may be occasionally infected by contact to SARS-CoV-2-positive keepers, but there is no indication of further spreading. (bioRxiv: [10.1101/2022.01.17.476608](https://doi.org/10.1101/2022.01.17.476608))

Antigenic cartography to quantify and visualize the antigenic relationships among SARS-CoV-2 variants. (bioRxiv: [10.1101/2022.01.28.477987](https://doi.org/10.1101/2022.01.28.477987))

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